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DEPARTMENT OF THE ARMY  
OFFICE OF THE ADJUTANT GENERAL  
WASHINGTON, D.C. 20310

IN REPLY REFER TO

AGAM-P (M) (3 May 67) FOR OT

✓ 11 May 1967

SUBJECT: Operational Report - Lessons Learned, HQ, 1st Aviation  
Brigade (U)

TO: SEE DISTRIBUTION

1. Forwarded as inclosure is Operational Report - Lesson Learned, Headquarters, 1st Aviation Brigade for 4th quarter year 1966. Information contained in this report should be reviewed and evaluated by CDC in accordance with paragraph 6f of AR 1-19 and by CONARC in accordance with paragraph 6c and d of AR 1-19. Evaluations and corrective actions should be reported to ACSFOR OT within 90 days of receipt of covering letter.

2. Information contained in this report is provided to the Commandants of the Service Schools to insure appropriate benefits in the future from lessons learned during current operations, and may be adapted for use in developing training material.

BY ORDER OF THE SECRETARY OF THE ARMY:

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*Kenneth G. Wickham*  
KENNETH G. WICKHAM  
Major General, USA  
The Adjutant General

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HEADQUARTERS, 1ST AVIATION BRIGADE

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AVBA-C

SUBJECT: ~~Operational Report~~ Lessons Learned for 4th Quarter Year 1966

(RCS GSFOR-65) (U)

14 Feb 1967

(9) Operational report

THRU: Commanding General  
United States Army, Vietnam  
ATTN: AVHGC-DH  
APO 96307

Commanding General  
United States Army, Pacific  
ATTN: GPOP-MH  
APO 96558

TO: Department of the Army  
Assistant Chief of Staff for Force Development  
Washington, D.C. 20310

SECTION I

SIGNIFICANT EVENTS

A. COMMAND

1. (FOUO) This headquarters continues the processing and approval of awards up to the Bronze Star Medal for all units of the brigade. The back log of 20,621 awards being processed as of 29 October 1966 has been eliminated. Approximately 1500 awards are processed weekly, thereby insuring that awards are presented on a timely basis.

2. (FOUO) Infusion within each aviation unit continues. Due to the application of sound personnel management techniques the ultimate goal of 1/12 personnel turn-over per month will soon be realized.

3. (O) Personnel Strength Status

Regraded at 3 year  
intervals declass-  
ified after 12  
years.

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2  
 a. The current Personnel Strength Status of the 1st Aviation Brigade is as follows: (C)

	<u>AUTH</u>	<u>ASGD</u>	<u>PDY</u>
OFF	1,078	1,427	1,316
WO	1,217	986	905
EM	<u>9,409</u>	<u>11,144</u>	<u>10,408</u>
TOTAL	11,704	13,557	12,629

b. Currently units of the 1st Aviation Brigade are stationed in approximately 40 geographical locations encompassing all of South Vietnam. Rarely are the battalion headquarters located in close proximity to their companies. Most of our battalions have company units stationed in excess of 30 miles from the battalion headquarters. Several of the Battalions have companies in excess of 90 miles and two battalions have companies in excess of 150 miles from the headquarters. Many of the company size units are further fragmented into one or more locations in order to provide close and responsive tactical support to the supported units. The requirement to provide administrative support and command and control within the units of the 1st Aviation Brigade requires more personnel than our units are currently authorized. We have been able to maintain some enlisted personnel in excess of the authorization. (FOUO)

c. The excess of enlisted personnel over and above authorization results in promotion and morale problems, as we must have existing grade vacancies in order to promote enlisted men to the next higher grade. Qualified enlisted men are transferred to promotable vacancies as the vacancies occur. Promotion vacancies brigade wide are being fully utilized to promote qualified individuals in units where promotion vacancies are lacking. Personnel so promoted are then transferred to the unit having the vacancy. (FOUO)

d. The 1st Aviation Brigade has a shortage of enlisted men qualified in MOS 67W (Helicopter Technical Inspectors). USARV and DA have plans to eliminate this shortage by March 1967. Currently we are screening the records of all enlisted men to insure that personnel with MOS 67W are properly utilized. (FOUO)

#### B. OPERATIONS PLANS AND TRAINING

1. (FOUO) Total aviation units decreased during the quarter due to the 1 January 1967 transfer of all CV-2 aircraft and support equipment to the US Air Force. The following units arrived during the quarter:

a. 335th Aviation Company (AML) (Had been attached to 173rd Avn Bde).

b. 269th Aviation Battalion HHC

c. 213th Aviation Company (Mdm Helicopter)

d. 329th TC Detachment CHFM

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2. (FOUO) The following aviation units were inactivated, 1 January 67, and the assets transferred to the USAF:

- a. 57th Aviation Company (FW)(CV-2)
- b. 61st Aviation Company (FW)(CV-2)
- c. 92nd Aviation Company (FW)(CV-2)
- d. 134th Aviation Company (FW)(CV-2)
- e. 135th Aviation Company (FW)(CV-2)
- f. 51st TC Detachment
- g. 138th TC Detachment
- h. 258th TC Detachment
- i. 260th TC Detachment
- j. 326th TC Detachment

3. (FOUO) Reorganization of Brigade Units. Action continued throughout the period to organize the Brigade units under the New Army Authorization Document System. As of 31 January a total of 19 MTOE's were being processed. Status of significant MTOEs is as follows:

- a. 1-77G Aviation Company (Airmobile) - 23 companies reorganized under PAC 1/66 and a MTOE to include aircraft and crew augmentation submitted to USARV.
- b. 1-77G Aviation Company (120th) - Staffing at Brigade.
- c. 1-77G Aviation Company (Escort Helicopter) - Submitted to USARV.
- d. 1-87G Aviation Support Detachment - AOD for class "A" and class "B" airfields submitted to USARV.
- e. 1-128T Aerial Surveillance Company - Staffing at Brigade.
- f. 1-207E Air Traffic Control Company - Submitted to USARV.
- g. 1-252F HHC Aviation Group - Final preparation and staffing at Brigade.
- h. 1-256F HHC Aviation Battalion (222nd and 223rd) - Being rewritten at Brigade as a result of review and comments by groups and battalions.
- i. 1-256F HHC Aviation Battalion (Capital) - Submitted to USARV.
- j. 1-256F HHC Aviation Battalion (214th) - Submitted to USARV. (109 Personnel strength)

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k. 1-256F HHC Aviation Battalion (Flight Facility) - Submitted to USARV.

l. 1-256F HHC Aviation Battalion (Airfield Control) - Being submitted to USARV as a requirement.

m. 1-257F Aviation Company (FW) Command Airplane - Submitted to USARV.

n. 1-257F Aviation Company (FW) Light (O-1) - Final preparation at Brigade.

o. 1-258F Aviation Company (Medium Helicopter) - Returned from USARV for revaluation of space requirements.

p. 11-303E Signal Radio operations Co (DECQA) - Submitted to USARV.

q. 55-500R Transportation Detachment (KD) - Initial preparation at Brigade.

4. (C) Relocation of units out of Tan Son Nhut Airbase.

a. The 125th ATC Company (-) closed into Bien Hoa during January 1967. This was an interim move with the final destination being Long Binh.

b. During the reporting period, continued progress was made in the planning for the Brigades' move to Long Binh and Long Thanh. A recapitulation of Aviation Brigade requirements at Long Binh was included in a letter to USAECV (Prov) dated 7 Jan 67. The formal request for the required spaces at Long Thanh was submitted to the Vietnamese JGS by MACV on 25 Dec 66. Upon the completion of the required facilities at these locations, an immediate move will be made by all elements of the 1st Aviation Brigade now located at Tan Son Nhut Airbase.

5. (FOUO) VNAF Pilot Training

The VNAF UH-1 Pilot Training Program that was initiated 2 Aug 66, as directed by COMUSMACV, has continued to expand. To date 24 VNAF Pilots have completed the three month program. Nine VNAF aviators completed the first course in November 1966, and fifteen more are scheduled to graduate in February 1967. The present plan is to conduct four courses of three months duration each per year, with a student input of fifteen VNAF per class. This will provide the Vietnamese Air Force with sixty well qualified UH-1 Pilots per year. The long range plan is for the VNAF to eventually conduct their own training, utilizing selected pilots, who have been trained by US Units, as their instructor pilots. The VNAF Pilot training is progressing nicely, and most of the problem areas during the early stages have been resolved.

6. (FOUO) Martin Baker Ejection Seat Trainer Device

In December, two (2) Martin Baker Ejection Seat Trainer Devices arrived in country. Accompanying the devices was a new equipment training

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5 team (NETT), to put the trainers in operation and instruct selected personnel, so they can supervise utilization of the devices after the NETT team departs. The trainer is a replica of the actual ejection seat in the OV-1 Mohawk, and is designed to familiarize crewmembers with ejection techniques and procedures. The first device was put in operation at Vung Tau, where the 73rd Aviation Company (OV-1) is located, and all the training was accomplished on schedule. However, when the NETT team went to Hue Phu Bai to set up the 2nd device for the 131st Avn Co (OV-1), they were confronted with extremely bad weather. After waiting for five days for the weather to improve, they decided to go on to Korea to set up another device. The team arrived back here in country near the end of January, and will have the Hue Phu Bai trainer set up and the personnel trained by 7 Feb 67. Aside from the weather delay, the NETT team has had no major problems. The ejection seat trainers are confidence builders for crewmembers, and are very valuable training devices.

7. (FOUO) Flight Status Orders

During this quarter the Flight Status Orders Section processed 1700 individual flight status actions, and the system has continued to improve. With a few notable exceptions, requests for flight status orders were much more expeditiously processed than in the previous quarter, and most units have improved their procedures for processing requests. The majority of the requests that have to be returned are the result of personnel not being familiar with or not complying with applicable regulations. All units have been advised of the procedures to be followed.

8. (FOUO) Research and Development

The brigade has continued to work with ACTIV in the evaluation of aircraft, armament and equipment. During this quarter the 1st Aviation Brigade took part in tests of the following equipment and systems.

- Firefly
- Low Light Level Television
- Throat Microphones
- Fire Resistant Flight Coveralls
- Smoke Generators
- Aerial Mine Delivery Systems
- Troop Ladders
- Starlite Scopes

Valuable data and experience has been gained by brigade units participating in the projects listed above. Additional evaluations will continue.

9. (C) Aviation Command Study and Proposed Increase in Aviation Force Structure.

The study to determine the command structure required for the command and control of programmed aviation units was completed. More than seventy separate companies, based on tactical commitment and geographic distribution, require sixteen battalion headquarters, four group headquarters, two brigades and an aviation command in order to assure the

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most effective and efficient utilization of critical assets. Due to the planning emphasis on the assault and assault support type units, the requirements for the command and control elements were not refined prior to the end of the previous quarter.

10. (FOUO) USARV Regulation 525-5 (C)

This headquarters has implemented procedures for all requirements of this regulation. Fortunately, the regulation simplified and clarified many procedures previously contained in USARV Emergency Operations Procedure SOP. Due to its timeliness, this regulation was well received by all units of this command.

11. (FOUO) Standardization

a. During the period, visits were made to operational units down to company level to assist in establishing a flight orientation, training and standardization program throughout the brigade. Emphasis was on adequate training programs for newly arrived aviators, aircraft commanders, instructor pilot qualification and standardization, and helicopter autorotation training.

b. There has been some concern over the problem of aircraft commander and instructor pilot shortages in the UH-1 helicopter companies. Aviator personnel replacements are either recent graduates of USAAVNS or a UH-1 transition course. This is a recurring problem, especially in the instructor pilot area. Programs have been established to have the instructor pilots working continuously with unit aviators while the aircraft commanders conducted crew training. This establishes a program whereby the stronger aircraft commanders, with instructional ability, are readily trained and appointed instructor pilots. The aircraft commanders assist by instructing the replacement aviator in aircraft operations, flight techniques and procedures of the Vietnam theater.

12. (FOUO) Firefly

On 23 Jan 67 a conference was conducted at this headquarters to discuss operational procedures and methods of employment of Firefly systems. Firefly is a term that pertains to specific type of night helicopter operation. In attendance at the conference were representatives of brigade units involved in Firefly operations. Presentations were made by personnel from the two units with the most Firefly experience, and differences in their methods of operation were discussed. A resume of items discussed at the conference was reproduced and distributed to all brigade units. As more information becomes available and units gain more experience, another conference will be held to formulate a standing operating procedure for Firefly operations.

13. (C) XM-47 Mine Dispensing System

a. The training program in the use of the XM-47 Mine Dispensing System and handling of the XM-2 "Gravel" mine enjoyed success during the period with personnel from both the 12th Combat Aviation Group and the 17th Combat Aviation Group receiving training. The training program

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enabled units of the 12th Combat Aviation Group to seed four targets on 26 December 1966.

b. The basis of issue for the XM-47 Mine Dispensing System was established as 2 each per Assault Helicopter Company. All assault helicopter companies will be issued the system on order of established priority as the systems become available.

c. Evaluation of the system and training with the system will continue as more systems are issued to the assault helicopter companies in the field.

### 14. (FOUO) ROK UH-1 Familiarization Training

In November a program was started to provide on-the-job training of Republic of Korea Army pilots and mechanics in the UH-1 helicopter. Eleven ROK Army aviators and nine enlisted men have been training with the 14th Combat Aviation Battalion since that time. The ROK Army pilots and mechanics are fixed wing qualified only, so they have been flying as co-pilots, and no attempt has been made to make them fully qualified UH-1 Pilots. The program has been beneficial to both countries involved. The ROK Army now has a nucleus of personnel who are familiar with the UH-1 helicopter, and at the same time the US units involved have been able to give their personnel much needed rest by integrating the ROK personnel into their flying and maintenance programs. This familiarization program has been well received.

### C. INTELLIGENCE

1. (FOUO) During the period 1 November 1966 to 31 January 1967, the S-2 Section continued its normal functions concerning intelligence and security. Also, during this period this section was given the staff responsibility for the Evasion and Escape Program within the brigade.

2. (FOUO) With the assignment of one officer to assume the duties of Evasion and Escape officer on a full time basis, a brigade wide program was established in close coordination with USARV, MACV and 7th AF. Evasion and Escape officers have been appointed down to company level, and it is expected that non-rated Special Forces qualified officers will be assigned to group and battalion headquarters to assume duties as full time E & E officers. There is a current shortage of briefing and reference material. Action to obtain such material has been taken. A briefing program has been established utilizing E & E information obtained primarily from the USAF. Brigade aviator personnel have attended the PACAF Jungle Survival School in the Phillipines, and monthly quotas for additional attendance have been obtained. Survival and Life Support Equipment, such as survival vests, evasion plastic charts, and blood chits are being issued to aircrew personnel as they become available.

3. (FOUO) Reconnaissance and Surveillance; the 1st Aviation Brigade OV-1 Representative assigned to this section attended the OV-1 Planning Conference held at Fort Lewis, Washington on 14-17 December 1966, and also

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briefed the ARCSA II Study Group in Washington, D. C. on 21-22 December 1966. An OV-1 Operations Conference, with representatives from all OV-1 units and interested headquarters, was held at this headquarters 13-14 January 1967, (Minutes of the Meeting Incl 3). A new concept of employment of OV-1 assets in RVN was prepared, staffed and submitted to USARV. 8

4. (FOUO) Intelligence and Security: Routine intelligence and security functions continued, with primary emphasis on security. The 1st Aviation Brigade Regulation 380-5 and a headquarters security SOP has been drafted and is currently being reviewed. Staff visits to the S-2 Sections of the Combat Aviation Groups were made, and visits to other subordinate units are being scheduled.

### D. LOGISTICS

#### Significant Events

1. (FOUO) An Aircraft Armament Officer has joined the S4 Staff. The addition of this officer greatly increases our capability to more closely monitor the armament systems within the Brigade and give assistance to subordinate units.

2. (FOUO) Approximately 600 sets of new body armor were received during the period and distributed to using units. This relieves our shortages somewhat, although there remains a requirement for 1600 sets. Additional quantities of armor are being furnished from US Army Natick Laboratory.

3. (FOUO) Two integral smoke generators utilized by the 12th Combat Aviation Group have proven to be very successful, and eight more are to be furnished by ACTIV for the Brigade in Feb 67. These will be distributed among the 12th Combat Aviation Group, 17th Combat Aviation Group and 13th Combat Aviation Battalion. Quantities of fog oil have been brought in country by 1st Logistical Command, and more is on requisition.

4. (FOUO) Aircraft tool sets and kits continue to be in critically short supply. Follow up messages to out-of-country suppliers have been initiated by 1st Logistical Command, but no responses have been received.

5. (FOUO) Ballistic resistant flight helmets were shipped to the command in Dec, but have been diverted through Okinawa. It is hoped that these helmets will arrive in Feb 67.

6. (FOUO) 158 survival vests for OV-1 aviators arrived in Dec 66. These have been distributed to Brigade units, 1st Cavalry Division, and 1st Infantry Division. The vests were fully equipped, to include the new RT-10 radio, and are a most welcome addition to the surveillance aircraft equipment inventory.

7. (FOUO) Nine indicator windsock units arrived in Jan 67 and have been distributed. Approximately eighty more are due in to fill requirements for all Brigade operated airfields and heliports.

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6. (FOUO) A requirement still exists for seventy five AN/PRC 25 radios. USARV approved an issue of five per AML company. Twenty seven radios were issued in Nov 66, but 1st Logistical Command stocks have not been adequate to meet the remaining requirement.

7 9. (FOUO) Construction of ARPA lights (Fireflies) continues on the USS Corpus Christi Bay. Eleven have been provided to Brigade units, five more have been completed, but are lost in transit between Cam Ranh Bay and Saigon, and nine remain to be manufactured. Total Brigade requirement is currently twenty five.

10. The processing and storage of radar/tower equipment, originally programmed as a mission of the 125th Air Traffic Company, has been made a responsibility of 1st Logistical Command, per direction of USARV. This was done because the 125th does not have the capability of handling such a large volume of tonnage, plus the fact that only a small percentage of the equipment would become brigade owned. The majority was for other in-country units. The 125th is providing technical assistance, however, and allocation of the equipment is determined by USARV. (FOUO)

11. (FOUO) Construction of facilities for subordinate units was disrupted; particularly for those projects already in progress, by the initiation of the self-help program. This program prohibited engineer troops from performing vertical construction.

12. (FOUO) The initiation of the Brigade Aircraft Crash Rescue and Fire Fighting program will provide beneficial results. This program will help coordinate the efforts of other agencies, which are not in the brigade chain of command, on a mutual support basis. Inspection of fire trucks and related equipment in the field revealed a lack of adequate maintenance. However, this maintenance will improve as a result of the program for the orderly evacuation of repairables to higher echelons. The maintenance posture of equipment assigned to airfields for operational control will also require constant monitoring in the future.

13. (C) The location of the new brigade headquarters at Long Binh has been narrowed to one of two adjacent areas. The buildings planned should be adequate for the brigade headquarters.

14. (FOUO) The layout of the Long Thanh North airfield was approved 30 Dec 66 by all future occupants. Minimum operational facilities should be completed by July 67, as the project has a high priority. Clearance distances will meet Army and Air Force requirements, and space for future expansion is provided.

15. (FOUO) The consolidated requirements for the Long Binh Helicopter were submitted on 1 Jan 67, providing for adequate facilities. One recent development has been the construction of twenty four helipads in an area near the planned heliport. This may modify some of the heliport development plans.

16. (FOUO) The 125th Air Traffic Company, less one platoon, moved to Bien Hoa in Jan 67. Facilities for the company are to be constructed

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at Long Binh, since Bien Hoa was an intermediate site in their ultimate relocation to Long Binh.

17. (FOUO) Plans are underway to have the runway and maintenance facilities at Cu Chi constructed by a civilian contractor. The local engineer unit does not have the capability for the scope of construction required.

18. (FOUO) A new daily aircraft status report is now in use, but experience at this time is insufficient to determine its full effectiveness.

19. (C) At the present time all assault helicopter companies except two have twenty one UH-1D aircraft. It is anticipated that within the next ninety days all assault helicopter companies will be at the authorized level of twenty three.

#### E. INFORMATION

1. (FOUO) Command Information: Due to the abundance of printed "Troop Topics", "Fact Sheets", "Command Information Fact Sheets" and other media produced on a regular basis by higher headquarters, there was little in the way of printed support to the Command Information Program produced by this headquarters during the period. One Troop Topics Bulletin on "Revolutionary Development" was produced and the Brigade newspaper "HAWK TALK" was authorized and published twice in December and January. Other items of timely Command Information import such as "Reduction of Piastre Expenditure" were personally covered by the brigade commander during regularly scheduled monthly conferences. Also the guide lines for Command Orientation Briefings for in-coming personnel were provided in a Brigade Regulation and stressed by the commander at his December conference.

2. (FOUO) Public Information: Publication of a Brigade Regulation, command emphasis, a "pep" talk by the MACV PI Officer at the December commanders conference and staff visits to all major subordinate unit IO's during the reporting period produced a tremendous increase in Public Information efforts of the Brigade. Over 1500 Home Town News Releases were dispatched by brigade units during the reporting period, and an average of over eighty general press releases per month nearly triple the preceding three months total. During the period, a distinctive News Release heading was instituted, which has drawn favorable comment from many of the Vietnam Press Corps members, who are always on the lookout for Army Aviation stories. Due to poor telephonic communications and wide dispersion of aviation units in country, institution of "Brigade IO Notes" as a means of getting the word out on practices, plans, and procedures to all subordinate IO's has proven extremely valuable.

#### F. SAFETY

1. (FOUO) During the period 1 November 1966 to 31 January 1967, this section was engaged for the most part in routine duties involving Aviation Safety and Accident Prevention. Staff visits were made to the 17th Combat Aviation Group, and 52nd and 145th Aviation Battalions in the month of November. Also in November, a USABAAR team arrived in Vietnam. The purpose of their visit was to provide assistance to units

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in the field, and acquaint themselves with existing problems. The team, consisting of an accident investigator and a flight surgeon, spent three weeks traveling throughout Vietnam talking with commanders, individual aviators, and crewchiefs. The team was co-hosted by the USARV Aviation Safety Division and 1st Aviation Brigade throughout their tour. The most salient problems encountered were units complaining of the time necessary to get analyses performed on failed parts sent to ARAIMAC, and that of pilot fatigue. One result of their visit was that a system is being devised to expedite the shipment of failed components to ARAIMAC. The new system will also reduce the possibility of the parts being lost in shipment.

2. (FOUO) The problem of pilot fatigue has long been and continues to be a factor in accidents. Commanders have attempted to alleviate the problem by requiring the aviator reaching ninety hours to be checked by the unit flight surgeon prior to being assigned additional missions. An aviator reaching one hundred and forty hours in any thirty day period is automatically grounded for forty eight hours. This problem is under continuous study by commanders and flight surgeons alike, to seek ways to reduce or eliminate this problem.

3. (FOUO) During the past three months the total number of flying hours amassed by Brigade units increased by 6% over the previous reporting period. However, there has been a 32% increase in the number of accidents incurred, for an overall rise in the accident rate. In this quarter, eighty four accidents occurred, as the Brigade flew in excess of 240,000 hours. For the same period only thirteen aircraft were lost due to hostile action. The pilot or human factor accounted for fifty seven of these accidents, or 66% of the total. A further breakdown of these human error accidents shows the following major cause factors:

LOSS OF RPM ON TAKE-OFF	14
TAIL ROTOR STRIKES	12
HARD LANDINGS	7
MAIN ROTOR STRIKES	7

4. (FOUO) Materiel failure has become a major cause factor in this reporting period, with engine failure being the most predominant, followed by tail rotor failures:

ENGINE FAILURE	15
TAIL ROTOR FAILURE	3

### G. SIGNAL

(FOUO) During the period 1 November 1966 to 31 January 1967, the Signal Section continued its functions of communications operations and communications-electronics staff assistance. Primary emphasis was focused on improvement of long lines communications; communications security; improvement of maintenance management; improved equipment posture; and internal office management. Significant activities in each of the above areas were as follows:

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## a. Long Lines Communications

(1) Members of the Brigade Signal Section participated with representatives of the USARV Signal Section in planning future requirements for long-lines telephone and teletype circuits between the levels of command of the Brigade, down to company level. Circuit requirements for common user telephone and teletype, as well as dedicated sole-user circuits were forwarded to USARV for consideration in planning the allocation of circuits in the integrated wide-band communications systems (IWCS). 12

(2) Assistance was given to the 17th Combat Aviation Group in obtaining a sole-user telephone circuit from the group to the re-located 223rd Aviation Battalion and from that battalion to the 131st Aviation Company, Hue Phu Bai. This is the first time that a direct circuit to the 131st has been available.

(3) Numerous staff assistance visits were made by the Communications Operations Officer to communications centers of subordinate units. During one of these visits it was determined that the 10th Combat Aviation Battalion had acquired the responsibility of operating an area communications center at Dong Ba Thin, due to the arrival in the area of additional units, including an Engineer Brigade Headquarters. The Signal Office was successful in causing the activation of an area center at Dong Ba Thin, thereby relieving the 10th Battalion for its tactical communications mission.

(4) Through the assistance of the Signal Section, a high frequency radio set was installed in the USARV Flight Detachment, which now enables control of the detachment's aircraft during flight. It is now possible to divert aircraft while on a mission, thereby improving aircraft utilization.

## b. Communications Security

(1) A study was initiated during the period of this report to determine requirements for radio speech security equipment within Brigade units. Total net requirements were developed and the results forwarded to USARV. Follow-up action, to include procurement and distribution of security devices will continue over the next 18 months.

(2) Increased emphasis was placed on radio frequency control and usage during this period. Interference reporting procedures and follow-up actions were improved. Frequency requesting and assignment procedures were reviewed and responsiveness increased. The overall benefit has been better frequency utilization, and curtailment of unauthorized frequency usage.

(3) The Communications Operations Officer conducted several inspections of crypto facilities of the Brigade units during this period, in order to assist in the establishment of new accounts, and to assure compliance with appropriate regulations concerning crypto security.

(4) The transition was completed in November to centralized

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distribution of codes and ciphers by the Brigade Signal Section. A review was conducted and action taken to eliminate unauthorized and insecure code systems in favor of approved operations and numeral codes. The Brigade SOI and SSI was revised and improved, and a new standard SOI Extract for aviators was designed and distributed.

### c. Maintenance Management

(1) Staff assistance visits to the thirty one avionics maintenance detachments of the Brigade continued during this period. This office coordinated the revision of supply procedures used within the detachments, to bring them into alignment with the revised AR 711-16, and to greatly simplify administrative records keeping, thereby permitting increased emphasis on actual maintenance and repair activities. The coming quarter will see a continuation of staff assistance in converting to the simplified stockage procedures.

(2) During the previous quarter a project was started to purify and reduce the large ASL of the avionics detachments, and to gather valid data on repair parts stockage required by deploying units. During this past quarter recommended ASL's were developed for various type units, and copies forwarded to the Commanding General, USAECOM for guidance in preparing future units for deployment.

(3) In joint action with the USARV Avionics Office and Headquarters, 34th GS Group, this office formed an Ad hoc committee to review the avionics maintenance problem within OV-1 units. The purpose of the conference was to determine the resources available for direct or general support maintenance, and to study problem areas arising in OV-1 peculiar maintenance. Actions were started to make more efficient use of limited resources available, and to obtain additional general support resources. This action will continue during the following quarter.

(4) The avionics retrofit program started on 28 October with sites at Phu Loi and An Khe. The purpose of the program is to update and standardize all aircraft avionics configuration within RVN. The program got off to a slow start, due to production of the modification kits. During this quarter, approximately 10% of the total in-country assets were modified. This office continues to coordinate the program, as it pertains to Brigade aircraft.

### d. Communication Equipment Actions

(1) The Signal Office assisted the S-3 in the preparation of MTOE actions for most of the Brigade units. The MTOE recommendations included such items as the addition of HF-SSB RTT communications down to company level, portable UHF and HF-SSB radios and communications security equipment, as well as improved maintenance capability.

(2) Follow-up action on obtaining avionics test equipment continued during this quarter. Lateral transfer of equipment between units reporting overages and shortages was arranged. At the request of

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this headquarters, additional searches of the 1st Logistical Command Depots were conducted, and approximately 500 items of test equipment were located. A list of remaining shortages was forwarded to the Commanding General, USAECOM for action to expedite shipment to RVN. The Avionics Officer has pushed this project to the point of personally delivering test equipment to remote units. 14

(3) A project was started during the previous quarter to convert all ground FM radio equipment in Brigade units to the new family of radios. During this quarter the transition was almost completed. Efforts in the forthcoming quarter will be directed toward obtaining new HF radio, teletype and ground navigation equipment.

e. Internal Office Management. In order to more effectively provide staff assistance to subordinate units, and increase communications operations efficiency, the Signal Section was the subject of internal management analysis during this period. The SOI/SSI production function was moved into the staff section proper, for better control and personnel utilization. The functions of the communications Operations Officer were increased to provide over-all frequency control, circuit engineering and processing of requests, and increased technical assistance to Brigade subordinate headquarters staffs. The workloads of the Avionics Officer and NCO were readjusted to provide for more technical assistance visits to subordinate units. The internal office files were revised to provide more control and easier access to historical data for individual project follow-up.

### H. SURGEON

1. (FOUO) Continued emphasis has been placed on providing medical coverage during combat assault operations. To this end, a Brigade directive was issued stating that flight surgeons and enlisted medics will accompany such missions whenever needed. In order to satisfy this requirement, a change was submitted to the pertinent USARV Regulation 40-23 authorizing non-crewmember flight status to enlisted medics who must fly.

2. (FOUO) A list was prepared and submitted for distribution down to the individual pilot level, listing fixed medical treatment facilities to which casualties being evacuated by backhaul aircraft may be delivered. The list gives the name of each treatment facility, its location by coordinates, its radio call sign and frequency. The list should ensure that every pilot has the information that he needs to make the most expeditious aeromedical evacuation, if he suddenly finds himself with this mission. Also, continued emphasis is being placed on the requirement that flight surgeons participate in pre-mission briefings, to ensure that pilots are aware of what medical facilities are available in the area concerned.

3. (FOUO) A first aid training program is being conducted by flight surgeons at battalion and company level to train aviators, crew-chiefs, and gunners so that they will be able to effect immediate resuscitative measures to casualties generated during combat assault missions. Several directives and messages were sent out from Brigade to get this program initiated, and have proven quite successful.

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4. (FOUO) The requirement for 9 additional Medical Detachments was forwarded to USARPAC. These will be added during the FY67 buildup.

5. (FOUO) During this period it was noted that medical records and reports were being completed in an unsatisfactory manner. Therefore, it was arranged for a medical records specialist from USARV to tour every Brigade medical unit to provide technical guidance on the proper methods for preparing these medical records and reports. A marked improvement resulted from this tour.

6. (FOUO) Because of the general absence of any coordinated program or agency to provide the Army aviator with adequate personal protective equipment or survival, escape, and evasion equipment, there has been much delay in obtaining needed equipment in adequate amounts. Therefore, a recommendation that a Life Support System Agency be formed at Department of the Army level was forwarded by this office.

7. (FOUO) The Hearing Conservation Program was concentrated during this period on the potential hazard of the XM-21 weapons system. A preliminary study involving one flight surgeon and a few aviators gave only equivocal results as to whether any appreciable hearing loss is produced. A more definitive follow-up study is in progress.

8. (FOUO) A new concept was developed for a Flak Chest Protector. The concept is intended to circumvent problems presently being experienced as a result of the requirement that pilots wear both a chest shield and a flak jacket. The present arrangement is so hot and cumbersome that pilots refuse to wear the flak jacket. As a result, they are experiencing injuries which possibly could be prevented. The new concept has flak absorbing material fixed into a chest protector, providing the benefits of both materials. No additional protection is worn on the back, which is protected by the armor plated seat. In summary, the proposed Flak Chest Protector is lighter, provides additional protection, and is more comfortable than the present system.

9. (FOUO) The design and type of material was determined for the NOMEX flame retardant flight suit, and an ENSURE requisition for this item is presently being completed. This flight suit should increase significantly the chances for an aviator to survive a post-crash fire, and will greatly increase his comfort and efficiency during flight.

10. (FOUO) A study is being developed to evaluate the new ballistic crash protective flight helmet which is presently arriving in-country. A user questionnaire survey is being prepared to evaluate this item for ACTIV. The main purpose will be to determine whether the helmet is actually successful in affording ballistic protection, although all aspects of the helmet's use will be studied.

11. (FOUO) The brigade flight surgeon continued to serve in the role of Aviation Medicine Consultant to the USARV Surgeon, holding regular conferences, and providing technical advice, assistance and liaison.

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Continuous liaison was maintained with the flight surgeons assigned to the 1st Aviation Brigade and to the divisional elements incountry. All flight surgeons entering the country were given an orientation briefing.

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### 12. (FOUO) Other routine duties performed included:

- a. Review of Command Health Reports.
- b. Review of 1972 Flight Physicals.
- c. Granting of 21 Waivers on Class 3 Flight Physicals.
- d. Preparation of 6 written articles for both USARV and 1st Aviation Brigade publications.
- e. Providing patient care to 1050 patients.
- f. Performing 36 flight physicals.
- g. Making miscellaneous staff visits.
- h. Performing flight duties.

13. (FOUO) The major aeromedical problem continues to be a lack of sufficient assigned flight surgeons to provide the Brigade with an adequate, well rounded aeromedical support program. Flight surgeons at both battalion and company level are so busy with clinical duties that they have to neglect their staff functions, which should in fact be their primary concern. In an attempt to deal with this problem, the following steps have been or are being taken:

- a. A command letter is being prepared to requisition increased assignments of flight surgeons to the Brigade.
- b. Correspondence has been sent to the Surgeon General's Office, making personnel there cognizant of the situation.
- c. The Director of Army Aviation, Brigadier General Williams, has been briefed on the situation.
- d. A directive has been prepared for brigade flight surgeons, stating that whenever other medical facilities are reasonably available, flight surgeons will confine themselves to providing medical support to aviation personnel only. A study was conducted to determine the units, to include troop strengths, which receive medical support from Brigade medical facilities. Thus, we are better able to pinpoint work overloads and properly distribute personnel.
- e. Wherever the geographic concentration of aviation units allows, aeromedical facilities are being consolidated into Battalion Aeromedical Dispensaries. Cellular subunits are then able to deploy with subordinate companies during missions. This consolidation allows for more efficient use of limited resources and provides more thorough and sophisticated medical support.

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### I. MILITARY HISTORY

7 (FOUO) The 8th Military History Detachment conducted staff visits to every major unit of the Brigade during the reported period. Considerable improvement was noted in historical activities, particularly in the maintenance of daily journals and journal files. Most units have prepared their CY66 records for retirement in accordance with Change 1, USARV Reg 345-200. The remainder will be completed in the near future.

### SECTION II

#### PART I

#### A. PERSONNEL

##### 1. (FOUO) Item: Over Specialization in Hard Skill MOS.

a. Discussion: Previously, the trend in training for avionics maintenance personnel was toward a generalist (MOS 31Q series) who had very basic radio maintenance background. As avionics equipment became more diversified, the need became apparent for a certain amount of specialization. The new 26 and 35 series of MOSs were developed, whereby a repairman specialized in either communications navigation, flight control systems, or airborne radar. The trend has now moved too far toward specialization. Personnel are being trained on just a few items of equipment, such as doppler radar, or one or two types of communications radios. Furthermore, they are being trained in a mechanical approach to maintenance, without enough theoretical background to allow them to improvise if a particular test set is not available. The problem is complicated by the fact that personnel who have special training on a given item of equipment are not identified, and leading to unit assignments where special training cannot be utilized.

b. Observation: In hard skill MOS training, all trainees should get a firm basic foundation before branching off into the specialty field. The specialty field training should again cover the broader aspects of that field. Finally, a percentage of advanced students should receive extra training on more complex end items, while the greater number of students go directly into the field. Those special advanced students, upon completion of the extra training, should be identified by a fifth digit in their MOS, as being particularly trained for the peculiar item of equipment, in addition to their general training in the specialty field.

##### 2. (FOUO) Item: Labor Saving Techniques

a. Discussion: In spite of tremendous increases in work-load with no increase in personnel, time and labor - saving procedures were instituted by the Information Officer, which have permitted accomplishment of the task with no appreciable lag in processing time.

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b. Observation: Significant among these practices has been the discontinuance of a brigade press run. Stories for local media release are taken daily to USARV IO in the afternoon for their press run the following morning.

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### B. TRAINING & ORGANIZATION

#### 1. (FOUO) Item: Command and Control Headquarters

a. Discussion: With the planning emphasis on movement of assault and assault support aviation units into RVN during the last fiscal year, the planning for command and control headquarters did not keep pace with the input of assault and assault support units.

b. Observation: When additional assault and assault support units are required, consideration of the proposed geographical area of employment of the new unit and span of control limitation of the parent unit will assist in determining the required number of command and control headquarters.

#### 2. (FOUO) Item: Artillery Advisories.

a. Discussion: One item of real concern to aviators is artillery fire in their path of flight. Some steps have been taken within the III Corps Tactical Zone to provide artillery information to aircraft. The zone has been divided into sub-areas, and an artillery advisory station established for each area. Ostensibly, the aviator may call the appropriate control frequency and receive all firing information within the sub-area. However, in practice not all firing is being reported by these control points. There is still no single agency in a given area which can furnish all artillery firing information. The I, II and IV Corps Zones do not have a standard advisory system established as yet.

b. Observation: An effective system of dissemination of artillery warnings is essential to flight operations. The possibility of flying into artillery fire is sufficiently probable to cause concern on the part of the aviator, thereby adversely affecting his mission performance.

#### 3. (FOUO) Item: Pre-assault Communications Coordination.

a. Discussion: A recent report of an air assault operation disclosed that very poor communications existed between the aircraft and the supported ground unit. The aircraft had not yet been retrofitted with the AN/ARC-54 radio, but still used the AN/ARC-44. The ground unit had all new radios, and operated them in the "new squelch position."

b. Observation: Detailed communications planning is an essential part of over-all planning for air assault operations.

#### 4. (FOUO) Item: Methods of Operation in Different CTZ's.

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a. Discussion: Brigade aviation units have noted many differences in methods of operation while operating in adjacent Corps Tactical Zones. These variances are primarily caused by varying terrain and methods of employment by individual ground commanders.

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b. Observation: The 1st Aviation Brigade is presently conducting numerous command and staff visits to study all methods of employment. It is expected that these visits will result in standardizing, as much as possible, the techniques and procedures to be used in all areas of operation. These techniques and procedures will be included in the revised Aviation Brigade Operations Manual, and should enhance the operational effectiveness of all units.

5. (C) Item: Combat Assault at Low Tide in Areas Affected by Tidal Flux.

a. Discussion: The timing of combat assaults to low tide results in several bonus effects. They are:

(1) The initial assault is easier because the helicopters land on firm ground and the troops do not have to exit the helicopter into water of unknown depth.

(2) Surveillance of the operational area is much easier for the ground commander.

(3) Viet Cong are severely restricted in exiting the area (Sampan cannot be used effectively).

(4) Ground troops can better detect booby traps that would be undetectable under water.

b. Observation: It is recommended, when practical, to plan combat assaults during low tide to take advantage of the bonus effects.

### C. SIGNAL

1. (FOUO) Item: General Support Maintenance for OV-1 peculiar and Ground Avionics Equipment.

a. Discussion: The findings of the Ad Hoc committee on OV-1 avionics maintenance once again affirmed the fact that there is no valid general support maintenance capability for OV-1 peculiar avionics within RVN. Units have attempted to perform limited general support maintenance themselves, through sheer desperation, in an attempt to remain operational. Although charged with the mission of providing general support, the 34th General Support Group (AM&S) lacks both test equipment and qualified personnel to render the support. As a result, items which the unit cannot repair themselves are evacuated to CONUS, causing excessive delays of up to one year in obtaining repairs. Since the primary items concerned are sensor components, the aircraft is essentially not mission ready during this protracted maintenance period. Only through dedicated management, and shifting of sensors between aircraft, are unit personnel able to keep the ships in

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the air. The same situation exists with ground avionics items, such as non-directional beacons and GCA radar units. The 34th General Support Group is charged with general support of these items also. Unfortunately no capability exists within the Group. As a consequence, when these sets go down for maintenance, they are out of action for extended periods. 23

b. Observation: It is essential that an effective general support maintenance capability for OV-1 and ground avionics equipment be furnished USAF Units. It is totally unrealistic to expect equipment of this type to be operational, and remain so, without maintenance support. The savings in spaces and equipment costs by non-deployment of general support personnel and equipment are negated by the loss of effectiveness in units crippled by the lack of adequate maintenance support.

### 2. (FOUO) Item: Unit follow-up of supply requisitions.

a. Discussion: Considerable emphasis has been placed on improving the repair parts supply picture for avionics in RVN. Although there is still a great deal to be accomplished in obtaining an adequate level of repair parts from CONUS sources, unit supply procedures also need improvement. Many times during the past quarter members of the Signal Office attempted to trace down critical parts requisitions or work orders for evacuated repairable avionics components. In virtually every case involving multiple items, there were document numbers which could not be identified. In most of these cases, no follow-up action had been taken by the unit for a considerable length of time.

b. Observation: With the volume of repair parts requisitions submitted by avionics detachments, and the number of repairables evacuated, it is essential that an aggressive follow-up program be maintained. Units should demand that their support elements give them periodic reconciliations of outstanding requisitions and work orders. The responsibility for follow-up rests with the initiator of the request action.

### 3. (FOUO) Item: Scheduled Maintenance for Avionics Items.

a. Discussion: Scheduled maintenance is outlined in the appropriate technical manual for each avionics item; whether it is a receiver, transmitter, transponder, or other major end item. When an aircraft is down for the periodic maintenance inspections, all avionics equipment should be pulled out of the aircraft, checked for possible defects or misalignment, and thoroughly cleaned. This checking and cleaning process should be extended to include antennas, cabling and couplers, even though these items are not taken from the aircraft.

b. Observation: Units that are performing this type of maintenance, report that their overall maintenance problems and workload have decreased considerably. It is recommended that all units establish this policy. Just because a radio continues to operate is no reason not to pull scheduled maintenance.

### 4. (FOUO) Item: Turn-in of Modules for Repair.

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a. Discussion: On occasion some avionics detachments have turned in modules with missing hardware to the general support activities. This hardware includes such things as covers, tube shields and screws. Like-item replacement can be difficult to obtain.

b. Observation: Turning in items as complete as possible for repair, not only takes a load off the supply system, but decreases turn around time for the item being repaired.

### 5. (FOUO) Item: Introduction of New Equipment.

a. Discussion: Once again new items of avionics equipment have been introduced into the combat zone, which are not supportable by maintenance units. The AN/ARN-82 and 83 radios started appearing in RVN during this past quarter. Although the maintenance support plan called for simultaneous introduction of repair parts packages, float, manuals and test equipment, they have not yet arrived.

b. Observation: The effect of introducing non-supportable equipment into a combat zone is two-sided. First the equipment itself is subject to failure, and when it fails, the aircraft in which it is installed must do without. Furthermore, by placing the new equipment in the aircraft, the unit is denied the older, but supportable equipment which it replaced. There is but one answer to this problem. Development and procurement of test equipment must be concurrent with development and procurement of the major item. The cost of the expedited development is more than offset by the potential saving of one life, which may depend on the new equipment to be installed in aircraft. Likewise, procurement of parts must be concurrent with the end item, even if end item production must be curtailed to divert parts to the maintenance support supply channel.

## D. LOGISTICS

### 1. (FOUO) Item: Requests for equipment in excess of authorized allowances.

a. Discussion: Aviation units are frequently required to provide their own base camp support and security, and are made responsible for operating an airfield. The TOE of these type units is not geared or intended for these operations, and to do the job properly, additional equipment and manpower is needed in a minimum of time. The current method of using MTOE requests to obtain men and equipment is both slow and cumbersome, and many of the items requested are not appropriate for TOE inclusion.

b. Observation: That a flexible, faster means of obtaining authority for requisitioning and retaining equipment and personnel for use in base camp and security operations would be highly desirable for units in RVN. This headquarters has recommended to USAFV that a TDA be formulated for each fixed-base airfield to accomplish base needs.

### 2. (FOUO) Item: Penepime

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a. Discussion: Penepime is a new, hard base, asphaltic material, which has been diluted with a kerosene and naptha solvent.

b. Observation: Penepime is proving successful as a dust palliative. The 165 gal bituminous kettle is the best single item of equipment for applying penepime at the small, numerous, widely scattered areas characteristic of aviation operations in RVN. The few kettles in country are assigned to a limited number of engineer units, and are not readily obtainable throughout the command.

3. (FOUO) Item: XM-21 Armament System

a. Discussion: 1st Aviation Brigade now has fifty eight XM-21 systems on hand, of which forty five are installed and operational. Reports reaching this office indicate that malfunctions continue at a low rate. Two systems are known deadlined for critical parts.

b. Observation: Information available indicates that critical parts will not arrive in theatre until 31 March. This indicates lack of coordination in the maintenance support plan.

4. (FOUO) Item: Linked 7.62mm Ammunition.

a. Discussion: At present, the only way to provide a 1500 round belt of ammunition for the XM-21 is to link together, by hand, 7½ 200 round belts. This is a time-consuming process.

b. Observation: A formal request has been submitted through channels to obtain 1500 round belts of 7.62mm ammunition for aircraft use only.

5. (FOUO) Item: Aircraft Maintenance Facilities

a. Discussion: When some of the aviation units arrived in Vietnam, no aircraft parking or covered maintenance facilities existed. The precision maintenance performed on all aircraft, but especially on CH-47 aircraft, requires covered maintenance facilities.

b. Observation: Lack of parking and covered maintenance facilities has created an undue hardship on personnel performing aircraft maintenance.

6. (FOUO) Item: Real Estate

a. Discussion: More consideration should be given to consolidating Army facilities; particularly where Army facilities are in the vicinity of facilities belonging to other military services. In the past there appears to have been an "open season" on facilities occupied by individual Army units. This was especially true when agreements, if they existed at all, were not formalized.

b. Observation: The use of more formal real estate agreements should add stability to units.

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E. SAFETY

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1. (FOUO) Item: Aircraft accident/combat loss.

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a. Discussion: The aircraft accident to combat loss ratio continues to be approximately seven to one.

b. Observation: To improve this ratio, continued emphasis is being placed on aviator standardization training, air crew teamwork and quality control in maintenance. Aviators are thoroughly familiarized with the "GO-NO-GO" procedures, and understand the limitations which climatic conditions impose upon the lifting capabilities of the aircraft.

F. INFORMATION

1. (FOUO) Item: News Releases

a. Discussion: The Army Home Town News Center does not credit releases from subordinate units of the 1st Aviation Brigade.

b. Observation: To insure better accountability of brigade releases, brigade units have been directed to reflect "1st Aviation Brigade" as the "from" agency on the DA form 1526 "Home Town News Release."

G. FLIGHT INFORMATION

1. (FOUO) Item: A requirement exists to supply aviators with information to assist in the successful completion of their flights, when the information does not meet the criteria of notices to airmen (NOTAM).

a. Discussion: NOTAMS are presently disseminated through the Air Weather Teletype system. This limits distribution, since any airfield not having a weather detachment would not receive the NOTAM. The criteria of information to be contained in a NOTAM is restrictive, and in many cases, information that would assist the Army aviators in achieving safer and more efficient flight operations is prohibited from publication as a NOTAM.

b. Observation: A proposed regulation was submitted to USARV aviation establishing procedures for the collection and dissemination of Flight Information Notices. These notices would contain information needed by the Army aviator that does not meet the criteria of a NOTAM, and would be transmitted over the command teletype circuit, thus obtaining widest dissemination.

SECTION II

PART II

RECOMMENDATIONS

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1. That a flexible, expeditious means of obtaining authority for

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requisitioning and retaining equipment and personnel for use in base camps be established by USARV. (Current MTCE submission procedure is too time consuming).

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2. (FOUO) That, when practical, combat assaults be conducted during low tide to take advantage of the many bonus effects derived.

3. (FOUO) That continued emphasis be placed on development of a workable artillery advisory system for aircraft throughout Vietnam.

4. (FOUO) That command emphasis be placed on obtaining a general support maintenance capability within Vietnam for OV-1 avionics systems and ground operated navigation equipment.

5. (FOUO) That training for hard skill MOS's, such as avionics, include a good groundwork of general theory. Also recommend that advanced students who receive special training on particular end items of equipment be identified, to facilitate proper assignment and utilization.

6. (FOUO) That Department of the Army level action be initiated to insure co-development and co-distribution of avionics test equipment and repair parts with new avionics items introduced into the field, particularly into the combat zone.

7. (FOUO) That 165 gallon bituminous kettles be stocked at base camps by PA & E or other Engineer sources for use on airfields within the area.

8. (FOUO) Construction planning, to include allocation of funds for permanent aircraft parking and covered maintenance facilities, should begin concurrently with plans to deploy an aviation unit overseas. This would permit completion of the permanent facilities prior to the arrival of these units.

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Incl

1. Commanders Notes
2. Tactical Lessons Learned
3. OV-1 Conference Minutes (CONF)
4. Aviation Brigade Command Structure
5. ~~Wade Talk~~

FOR  
JOHN DIBBLE JR.  
Colonel, Artillery  
Acting Commander

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AVHGC-DH (14 Feb 67) 1st Ind  
SUBJECT: Operational Report-Lessons Learned for the Period Ending  
31 January 1967 (RCS CSFOR-65)

HEADQUARTERS, UNITED STATES ARMY VIETNAM, APO San Francisco 96307 14 APR 1967

TO: Assistant Chief of Staff for Force Development, Department of the  
Army, Washington, D. C. 20310

1. This headquarters has reviewed the Operational Report-Lessons Learned for the period ending 31 January 1967 from Headquarters, 1st Aviation Brigade and forwards two copies of the Report.

2. Pertinent comments are as follows:

a. Reference Paragraph A3d, Section I, Page 2: The shortage in MOS 67W (Helicopter Technical Inspector) exists command-wide. However, the situation is improving steadily due to positive DA action to identify and/or to train qualified replacements for USARV. The 1st Aviation Brigade currently has assigned eighteen of the twenty-one MOS 67W personnel authorized (85 percent), and probably will be at 100 percent of authorization by mid-year.

b. Reference Paragraph E3, Section I, Pages 3 and 4: The current status of MTOE's is as follows:

(1) (Paragraph E3a) 1-77G Aviation Company (Airmobile): Forwarded to USARPAC on 22 November 1966.

(2) (Paragraph E3c) 1-77G Aviation Company (Escort Helicopter): Under study at this headquarters.

(3) (Paragraph E3d and E3k) 1-87G Aviation Support Detachment, and 1-256F HHC Aviation Battalion (Flight Facility): These two MTOE's have been combined and are being processed at this headquarters.

(4) (Paragraph E3f) 1-207E Air Traffic Control Company: Under study at this headquarters.

(5) (Paragraph E3i) 1-256F HHC Aviation Battalion (Capital): MTOE is being held in abeyance at the unit's request.

(6) (Paragraph E3j) 1-256F HHC Aviation Battalion (214th): Forwarded to USARPAC 23 March 1967.

(7) (Paragraph E3m) 1-257F Aviation Company (FW) Command Airplane: Under study at this headquarters.

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(8) (Paragraph B3p) 11-303E Signal Radio Operations Company (DECCA): Forwarded to USARPAC 17 March 1967.

c. Reference Paragraph D4, Section I, Page 8, concerning aircraft tool sets and kits: Concur. Headquarters, 1st Logistical Command, in coordination with the 14th Inventory Control Center completed a study in February to determine valid dues-in for tool sets and kits and to establish proper requisition objectives. In addition, MILSTRIP TWX requisitions were submitted on 19 February 1967 to appropriate CONUS supply sources for requirements in addition to those due in. These requisitions were submitted with an Issue Priority Designator (IPD) 02 and request for airlift. Receipts will be used to fill immediate requirements. Long standing low priority dues-in were given higher IPD's.

d. Reference Paragraph D5, Section I, Page 8, concerning flight helmets: Concur in comment. Approximately 1700 helmets arrived in USARV depots by 15 February 1967. An additional 12,475 are expected to arrive in RVN by 1 May 1967. Action has been taken to have helmets shipped from CONUS directly to RVN, and to insure that all stocks previously diverted to Okinawa are shipped to RVN.

e. Reference Paragraph D6, Section I, Page 9, pertaining to shortage of AN/PRC-25 radios: Concur with comment. All CONUS production is being shipped to RVN. Insufficient assets exist to meet all demands. Present stores are reserved for replacement of battle losses in combat units.

f. Reference Paragraph D15, Section I, Page 9, pertaining to interim heliport: Nonconcur with comment. The 24 helipads north of the 93d Evacuation Hospital were constructed to allow early deployment of the 45th Ambulance Company from Saigon to Long Binh. It was not originally planned nor constructed to the requirements of a permanent heliport, and current planning is to close down this interim facility upon completion of the permanent facility.

g. Reference Paragraph H6, Section I, Page 15: USARV concurred in the recommendation that a Life Support Agency be formed at DA level and forwarded correspondence to USARPAC on 29 December 1966. USARPAC forwarded a recommendation to DA on 20 January 1967 that the requirement be taken under study at DA with representatives from USARV and USARPAC in attendance.

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h. Reference Paragraph H13, Section I, Page 16: Concur. The shortage of flight surgeons exists command-wide. This has been brought to the attention to DA.

i. Reference Paragraph A1, Part I, Section II, Page 17, and Paragraph G5, Part II, Section II, Page 24: Concur with recommendation.

j. Reference Paragraph B1, Part I, Section II, Page 18, concerning Command and Control Headquarters: Concur. The aviation command structure and stationing plan must be responsive to tactical requirements. With the programmed increase in combat aviation companies and battalions, the span of control for the two aviation groups under the 1st Aviation Brigade will be stretched to its limits. USARV is presently staffing the requirement for an aviation command, two aviation brigades, and four aviation groups to provide adequate command and control for aviation resources in support of forces in RVN.

k. Reference Paragraph B2, Part I, Section II, Page 18; and Paragraph 3, Part II, Section II, Page 24: Concur. Action is being taken by I Field Force Vietnam, II Field Force Vietnam and Senior Advisor, IV ARVN Corps, to develop plans for the dissemination of artillery advisories in the respective areas. II Field Force Vietnam has published their plan. Publication of the I Field Force Vietnam plan is anticipated soon. Senior Advisor, IV ARVN Corps, has not advised this headquarters of the estimated completion date of his plan.

l. Reference Paragraph C1, Part I, Section II, Pages 19 and 20; and Paragraph 4, Part II, Section II, Page 24, concerning Avionics Maintenance: Concur. The 34th General Support Group has neither the critical skills nor the equipment to repair OV-1 peculiar avionics items and ground operated navigational equipment. The US Army Electronics Command (ELCOM) has been advised of this inadequacy. As a result, ELCOM personnel have been sent to RVN to explore the situation. USARV is presently working with ELCOM and the 34th General Support Group to obtain spaces and special test equipment to provide adequate support.

m. Reference Paragraph G5, Part I, Section II, Page 21; and Paragraph 6, Part II, Section II, Page 24, concerning the Need for Development and Procurement of Test Equipment concurrently with the Development and Procurement of Major Items: Concur.

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AVHGC-DH (14 Feb 67)

SUBJECT: Operational Report-Lessons Learned for the Period Ending  
31 January 1967 (RCS CSFOR-65)

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n. Reference Paragraph D1, Part I, Section II, Page 21; and Paragraph 1, Part II, Section II, Pages 23 and 24, Concerning Requests for Equipment in Excess of Authorized Allowances: The procedures for requesting equipment in excess of authorized allowances recently have been revised. The revision was disseminated to all commands by USARV Message 19073, 25 March 1967.

o. Reference Paragraph D2, Part I, Section II, Pages 21 and 22 and Paragraph 7, Part II, Section II, Page 24, Concerning Stockage of 165 Gallon Bituminous Kettles at Base Camps: Nonconcur with recommendation. Although effective for peneprime distribution, the equipment is too sophisticated for use at base camp sites, and assets are limited in RVN. This headquarters has advised subordinate commands that desired results in applying peneprime can be obtained with the use of simple, locally fabricated field expedient equipment. USA Engineer Command, Vietnam, is making drawings and specifications for the field expedient distributors, and 1st Aviation Brigade S-4 has been advised of the availability and source of the plans and specifications.

p. Reference Paragraph D3, Part I, Section II, Page 22, Pertaining to Repair Parts Shortage for XM-21 Armament System: Concur in discussion, nonconcur in observations. Shortages of selected repair parts for the XM-21 armament system exist. The maintenance support plan included simultaneous introduction of repair parts packages based on forecast requirements. Accurate repair parts requirements can be determined only with experience factors. Present shortages have developed through operational usage and unexpected sub-system failures. Supply action has been initiated to correct the situation.

q. Reference Paragraph D4, Part I, Section II, Page 22, Pertaining to Linked 7.62mm Ammunition: Concur with unit's requirement as stated. On 28 January 1966 this headquarters requested that the Army Ammunition Procurement and Supply Agency direct procurement of 7.62mm linked tracer ammunition packaged in 1500 round belts. This ammunition is now available in South Vietnam in 750 round belts. This quantity was chosen rather than the 1500 round belt because two 750 round belts would easily fit into the M548 containers.

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r. reference Paragraph D5, Part I, Section II, Page 22, and Paragraph 8, Part II, Section II, Page 24, concerning maintenance facilities: Concur. Facilities are programmed for incoming aviation units concurrently with plans for the oversea deployment of these units. Construction backlog, operational support missions, shortages of some materials, and the uncertainty of the unit's ultimate location sometimes preclude the guaranteed completion of facilities by the time the unit arrives in the Republic of Vietnam.

s. Reference Paragraph D6, Part I, Section II, Page 22, pertaining to real estate: Concur with comments. USARV attempts to formalize occupancy agreements for all units or areas for which USARV has real estate responsibility. Because of the rapid buildup of the military forces of all nations in RVN, a critical shortage of suitable facilities exists. All facilities are utilized beyond their maximum utilization standards. When space requirements for new units with higher priorities and specific limitations develop, they are sometimes satisfied by command decisions to relocate existing units, based on operational necessity.

t. Reference Paragraph G1, Part I, Section II, Page 23, concerning dissemination of flight information: Concur. USARV is presently engaged in a joint program with 7th Air Force to enhance the Notice to Airmen (NOTAM) service. It is anticipated that the criteria for information to be contained in a NOTAM will be revised and expanded to include all items that present a hazard to flight, with the exception of artillery firing. The proposed regulation submitted by 1st Aviation Brigade pertaining to dissemination of flight information is being studied for possible inclusion in a USARV publication.

FOR THE COMMANDER:

  
JERRY VAN HORN  
2LT, AGC  
Asst. AG

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DEPARTMENT OF THE ARMY  
HEADQUARTERS, 1ST AVIATION BRIGADE  
APO 96307  
"NGUY HIEM"

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AVBA

8 December 1966

COMMANDER'S NOTES  
NUMBER 9

1. GENERAL: The following matters of information, guidance, command interest and policy are published for appropriate action of those concerned. Most of the items were covered at the Commander's Conference on 3 December 1966.

2. COMMAND:

a. Piaster Expenditures. We have received a couple of CONFIDENTIAL messages concerning reduction of Piaster expenditures to help stabilize the RVN economy. These messages were distributed down to battalion level. The heat is really on this program and will require command attention by all concerned. Keep your Piaster expenditures to an absolute minimum.

b. Service. I have had the speech that was made by General Abrams at the annual AUSA meeting in October 1966 reproduced for distribution down to company level. It is also attached at inclosure 1. This speech carries a very clear message which should be common knowledge to every member of this command.

3. PERSONNEL AND ADMINISTRATION:

a. Reports. We still have not received any results on the reduction or consolidation of reports study which was requested a couple of months ago. My staff can't take action on this unless they get some input from the field as to what we should or could do. Get your people cranked up on this and let's see if we can get some of these reports discontinued or at least simplified.

b. Contests. The Brigade regulation on the photo and writing contests were written as permissive directives. To date, we have had zero response in both areas. I have instructed my staff to change the regulation to require monthly response. These two contests were formulated to get our units and personnel better coverage locally and in the national magazines and trade papers. Let's get these programs going now!

c. Extensions. A USARV regulation has just been distributed covering the entitlement to free leave and travel for those who extend for six months or more. Only one hooker -- a six months' extension does not include the one month free leave; therefore, it is actually a seven-month obligation. I want an aggressive campaign to get our key

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NCO's, technical inspectors and other enlisted men who are in short supply in our units to extend and take advantage of this program. Push the pay and savings angle when you give them the sales pitch. Nudge the officers on this also.

### d. Awards.

(1) The quality of write-ups is better in general; however, for valor you must emphasize what the individual did, not what the aircraft or unit accomplished. The spot awards program is being utilized well, BUT we are not getting the follow-up paperwork. None of the awards are worth a damn without general orders. It takes recommendations to get the orders -- just that simple.

(2) We are doing everything we can to get USARV to loosen up on their criteria for awarding the DFC. I am told that the 7th Air Force has a program whereby commanders are urged to recommend every crewmember for a DFC during his tour over here. They take the best mission the guy has had during his tour and award the DFC for that mission. We cannot go to that extreme but can use their system as an indicator. Above all, make sure your write-ups are complete and conclusive.

(3) We find a considerable variation between the divisions on the awards they are making. The 1st Infantry Division has a very liberal program and is really taking care of our battalion that supports them. Some of the other divisions and units we support seem to forget us when the time comes to pass out the decorations. See if you can work something out with your supported units and get their consideration on this matter.

e. Christmas Rotation. Operation "SANTA CLAUS" will not be in effect during this holiday season. We just cannot let our people go home early for Christmas. You will be very short-handed during this particular period and although the augmentation packets that we are receiving will help some they will not help that much.

f. Offenders. We have had some "repeaters" in the trouble making area. One of the best tools available to the commander is the bar to reenlistment. Would like to see more use made of this tool when applicable.

g. Technical Inspectors. We had a witch hunt for TI's during the past month. Units alleged critical shortages. Investigation revealed that units were short of qualified TI's but this shortage was not reflected in strength reports and requisitions. The reason being that unit commanders have been using the TI slots for promotion of deserving crew chiefs; which helps our guys but does not get the best qualified people to do the job. This practice eliminates our gripe about shortages of TI's and also has an adverse impact on maintenance standards. If a

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vacancy exists and you have a guy that is qualified (i.e., one that has sufficient OJT to do the job) go ahead and promote him; otherwise requisition and keep the unqualified types out of the job.

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h. NGUY HIEP. This is our Brigade motto and means "Dangerous" Need to see it used more. I think it adequately describes our impact on the VC and war effort.

4. INTELLIGENCE: We now have an E&E officer in the Brigade headquarters to get the program organized and off the ground. We have also requested one non-rated E&E officer per group and battalion headquarters. At company level it will have to be an additional duty. Since non-rated types are hard to come by right now, group and battalion headquarters will also have to assign E&E as an additional duty until an officer is assigned for that specific job.

5. OPERATIONS:

a. Flight Status Orders. We continue to get gripes on flight status orders being late. There is no reason it should take over 30 days to get orders after a proper request is submitted. If you run into problems, have a knowledgeable type come to Brigade headquarters to track down or follow-up.

b. Historical Reports. Historical data is being pushed. My historian will be on the road during December and January to assist you with preparation of the annual history document. Make sure the unit reports are well done as these will go into DA where they are writing the history of this war.

c. VNAF Aviator Training. Class #2 of the VNAF Aviator UH-1D Transition Training is in progress with seven VNAF pilots in the 12th Combat Aviation Group and eight in the 13th Combat Aviation Battalion. An LOI is forthcoming from Brigade headquarters which is based upon the agreement with the USAF Advisory Group. If any problems crop up let us know.

d. AAKTP School Visits. The CO, 765th Transportation Battalion has a very fine school going at Vung Tau for our maintenance types. He has extended an invitation to all unit CO's to visit the school and see how it operates. I would like to see all of the unit CO's here in the Brigade pay them a visit. Contact my S-3 and he will coordinate your visit.

e. Rules of Engagement Cards. We made distribution of these cards over the past two weeks. They are a bit redundant, but evidently needed. We're still getting several interpretations of the rules -- depending on which crew member you talk with. Pass the cards around and continue to repeat the rules during briefings.

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f. Standardization. USARV Regulation 95-6 covers standardization will be out in mid-December and should provide some good guidance and assistance. The Brigade Standardization Officer will be coming around to discuss and assist you with problem resolution in this area. 34

g. Dragging. Recently observed some pretty stupid tricks by our guys, and others, at Vung Tau. I am sure it's happening elsewhere also, but low drags over, and landings on, populated beaches and other areas just don't hack it! NOTAM's have been put out but are not observed. Cowboying is childish and usually results in someone getting hurt. Get the word out to your guys to knock it off. Bear down on those people in the show-off business.

h. Operational Hazard Reports. As you know, we are pushing these things. To get a feel for how and what we are doing in this area I'd like to have information copies of these sent to my headquarters as well as through OPCON channels. We have a simple form for you to use. Encourage your people to put these reports in.

i. MACV Directive 95-9, 27 October 1966. This document should be in your hands by now. It's pretty specific in the area of Airfield Control and Facilities. Check it over and see how much we can comply with on our forward strips. Make sure, however, that you as Commanding Officers become completely familiar with this directive and review it with your aviators, and your supported unit commanders -- they are actually responsible for running the airfields, but you should be sure they know it.

j. Vulnerability.

(1) We have run an analysis on the number of hits taken by Army aircraft here in RVN. The analysis has been broken down by unit. It is quite noteworthy to find that the 13th Battalion has experienced three times the average number of hits taken, and that the 12th Group has a higher rate than the 17th Group. This is not a finger pointing or questioning exercise. What we are looking for are trends or factors involved that are causing us to get shot-up. Some of the factors that we have come up with, which are not all inclusive, are:

(a) All serious hits are being taken on approach into, time spent in, or on take-off from the LZ

(b) Most serious damage occurs on successive lifts. "Charlie" will oft times let the first lift come in without disclosing his presence and then set up AW's to shoot down the aircraft when they start in on the second and subsequent lifts.

(c) Scant preparatory fires prior to going into the LZ.

(d) Insufficient recon with gun ships.

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- (e) Multiple lifts.
- (f) Small operations.
- (g) Pacification operations.
- (h) "Trail" formations.

(2) Reducing hits: We have come up with a list of items that may help in reducing hits. These are:

- (a) Vary arc light follow-ups.
- (b) Use deception plans.
- (c) Use intense but brief preparation and suppression.

When you can't prepare you've got to find another way around it. A thorough recon is one way.

- (d) Avoid multiple lifts: When unavoidable:

1. Vary flight routes.
2. Use multiple LZ's.

- (e) Avoid reinforcing an LZ under fire.

(f) Avoid "trail" formations into the LZ. There are many variations that you can use and still meet the ground commander's desires for spotting the troops where he wants them without arranging our birds in a line of ducks.

(g) Suspect that "Charlie's" intelligence source is just as good as ours. When the papers and news media start covering a forthcoming operation you can rest assured that the VC know all about it. They will set up "mousetraps" to catch our birds when they know where an operation is about to take place.

(3) Pacification missions: In order to reduce aircraft vulnerability and possible hits during pacification missions we have established the following guidance:

- (a) Recon LZ's with gun ships.
- (b) Where possible, use multiple LZ's.
- (c) Land the whole force at one time.
- (d) Use smoke or CS.
- (e) Be prepared to suppress and call in air and artillery quickly, if required.

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k. Tactics. One of our assault helicopter companies has developed a tactic that they have used on several missions which has proven quite effective. They send several of their gun ships into the LZ just ahead of the slicks. The slicks also have escort gun ships flying on their flanks. The gun ships preceeding the slicks by one or two minutes lay down heavy fires on all suspect positions around the LZ. The technique they use is "moving-hovering" fire. Then as the slicks come in the gun ships in the LZ join the lift escort gun ships and circle around and cover the area while troops are off-loaded and the slicks take off. When a new technique such as this is developed let us know so we can put it out to the other units.

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1. There is a daily and weekly requirement for units to submit the OPREP-5 report through OPCON channels with information copies to my headquarters. Get with the program! We are missing out on a great deal of information from both an operational and informational point of view. You also have a daily requirement to call in the information concerning your proposed operations (PROPREPS). We now get them from only four units, and these come in sporadically rather than on a daily basis. Get this information to me. I want to be informed of what you're doing.

6. SAFETY:

a. We have had a couple of horrifying months in this area. The month of October saw us record the highest accident rate ever experienced in RVN. The USARV rate was 39.2 for October. During that month the non-Brigade units had a higher rate. In November, however, the Brigade was high and the non-Brigade units' rate declined. Some of the accidents were really stupid, such as hovering too close to parked birds which meshed rotor blades and trying to fly when over loaded. We've got to keep on our guys, even the most experienced, to stay alert and avoid "dumb" type accidents.

b. RPM. Still too many loss of RPM accidents. It appears that when the GO-NO-GO rule says "GO", some of our people are "horsing" the birds into the air which reduces effectiveness of available power and lift. This has been true in DCS missions when there was no shooting, which is inexcusable. We've simply got to keep drilling our people. If nothing else they should pick the Huey up to a 10-or 15-foot hover and test the lift; then if it looses RPM they have got someplace to set it back down. Continue to bear down on this problem.

c. I want both groups and the 13th Battalion to analyze your November accidents. Send me a poop sheet indicating whether you think we can determine any significant trends or any general unsafe practices which are increasing.

7. LOGISTICS:

a. Shoulder Patches. Our patches are being made now in Korea. Initial order is for 20,000 colored -- 50,000 subdued. We plan to pick

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these up on or about 15 December 1966.

b. PRC-25's. Twenty-seven were issued during the month of November. We are still working with 1st Logistical Command to get more, quickly.

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c. Survival Kits. One hundred OV-1 survival kits are due in during December and will be issued after minor modification. An additional 100 will accompany deploying OV-1 units. 31 January 1967, has been established as the NLT date for receipt of lightweight survival kits for aviators and crewmen in RVN. We expect 8,000 of them to be manufactured and shipped.

d. RT-10 Survival Radios. 1,667 RT-10's are expected in December and January in lieu of the URC-10.

e. Scarfed Rockets. We must not use unscarfed 2.75" rockets on our Huey gun ships. They're not safe -- and are not authorized for use. ASP's will DX all your unscarfed for scarfed rockets on a one-for-one basis. Scarfed rounds are identified with the marking "LSFFAR MK40".

f. PLL and ASL. We ran you around the AMMC today for a reason. Although our aircraft supply system is improving, the EDP rate is higher than I've ever seen it. One reason for this is because of the high number of flying hours we've been logging. The other reason is that we are still not in good shape PLL and ASL wise. I want each of you commanders to really put the heat on the PLL and ASL business. The 34th GS Group will give you all the help you need. When an aircraft is reported as EDP find out why. If it is because of PLL or ASL shortage then somebody should be made to explain the circumstances and correct the unsatisfactory situation.

g. Security of Equipment in Flight. Two recent incidents point out the need for better stowing of loose equipment in our aircraft. Two weapons were lost in flight due to being improperly secured. This type of "Fall Out" is not only costly in equipment, but can also cause damage to our birds and injury to personnel on the ground.

h. Maintenance Organization and Procedures. My maintenance officer has put out a poop sheet (inclosure 2) outlining some highly successful procedures in use by the two companies which enjoy the highest maintenance standards and availability rate in the Brigade. I'd like to see the principles applied across-the-board. Look at them -- see how you can improve your maintenance SOP -- and if you have any better ideas pass the word to us so that we can spread it around.

8. INFORMATION: Our PIO program is picking up a little bit and we need to keep pushing it. A new Brigade regulation has been published on this subject. The program is oriented on both command information and public information. Goals of the total program are:

a. Orient new personnel and keep all personnel informed.

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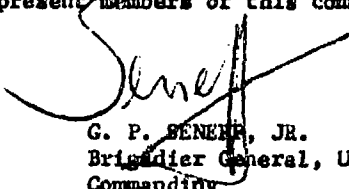
- b. One hometown release per man per year.
- c. One news feature story per unit per week.

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9. Finally, I wish to state that all is not bad. I know I harangue you a lot in these meetings and notes; you know that this is simply because, good as you are, we can never afford not to be better. In these current days of shortages, our guys have surpassed themselves in getting the job done, cheerfully and willingly. They are setting new records for flying time and availability in the face of pretty considerable odds, and I know they are meeting themselves coming while going. I want them to know that I am proud of them -- and you. And I want you all to know that I'm not alone. I have gotten nothing but praise from our supported units and from others in-theater, and this should be passed on to them. They're superb!!

10. HOLIDAY SEASON: I wish to extend the heartiest of Season's Greetings to all who read these notes -- friends of the Brigade and Army aviation, as well as past and present members of this command.

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G. P. SENEFF, JR.  
Brigadier General, USA  
Commanding

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ADDRESS BY  
GENERAL CREIGHTON W. ABRAMS  
VICE CHIEF OF STAFF, UNITED STATES ARMY  
ANNUAL MEETING OF THE ASSOCIATION OF  
THE UNITED STATES ARMY  
SHERATON - PARK HOTEL, WASHINGTON, D. C.  
TUESDAY, OCTOBER 11, 1966--9:00 A. M. (EDT)

SERVICE

When a man enters the United States Army he takes an oath which includes these words:

"I do solemnly swear--or affirm--that I will support and defend the Constitution of the United States against all enemies, foreign and domestic; that I will bear true faith and allegiance to the same; and that I will obey the orders of the President of the United States and the orders of the officers appointed over me, according to regulations, and the Uniform Code of Military Justice. So help me God."

The government asks, and has a right to ask, for obedience, because without it there would be only confusion and anarchy. Although ours is a free society where freedom of speech and other personal liberties are jealously guarded, the soldier must sacrifice--and properly so--a portion of his personal liberties so that they may be preserved for all others, including those who mock him and criticize what he is doing. The soldier, from the earliest period of our history to the present day, has seen and heard expressions of dissent about him, and though he may resent them, he knows that it is just for dissenters to express their views, and is willing to fight for their freedom to speak out.

Fighting for the other fellow's freedom of dissent is just one of the many tasks--some well-known and others little recognized--that the soldier derives from his enlistment oath. In obedience to the decision of his Commander-in-Chief, he serves both at home and abroad, and his duties range all the way from training and simple housekeeping tasks to open combat. His tasks and missions are legion, and every one of them is calculated to contribute to the Army's ultimate role of defending this nation against all enemies, foreign and domestic.

A major share of the world's attention--and that of your annual meeting this year--is directed toward South Vietnam. Many reasons could be given to justify our presence there, but basically the soldier is there because of his oath--because our Commander-in-Chief has

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decided that he is needed there. His job in fighting in support of our national commitments is clear, and the splendid work he is doing there has been or will be fully covered in other presentations here. But the soldier's oath takes him to many other places--98 other countries, in fact--and though he may not be engaged in an actual shooting war, he is serving his country and fulfilling his oath in the same sense as the man fighting in Vietnam. 40

I had originally planned to talk in some detail about these men--the men of the Seventh Army in Europe, the Eighth Army in Korea, our strategic reserve forces here at home, and all the many other units--but the more I thought about it the more I realized that I would be discussing something with which you are already quite familiar. At the same time, another thought--one very close and dear to my heart--kept crowding itself into my mind. This thought concerns the future of America, the importance of our young men to this future, and the tremendous influence that the Army has on both. That is what I want to talk about this morning.

From the standpoint of statistics alone, the influence of the Army and the other Armed Forces on our young people is staggering. At the end of August this year there were more than 3.1 million men in the four fighting services--more than a third of whom, 1.2 million, were in the Army. During fiscal year 1966, the Army received and trained more than 488,000 men and, in about the same period, returned some 250,000 to civilian life. Can you name a college or any other institution with a graduating class of that dimension?

One more figure. It has been estimated that there are now nearly 35 million people in America who have served in the Armed Forces; about half of these wore the Army uniform.

With those statistics as a basis, I think we can safely say that we have a tremendous obligation to the Nation, over and above the basic one of providing our share in the national defense. The young man in uniform is more than a soldier--he is also part of America's strength for tomorrow. When we deal with him we are entrusted with a national asset that cannot be priced in dollars and cents because its worth is really beyond calculation.

I believe that the first step we should take in dealing with our youth of today is a matter of assuming the proper attitude. We must begin by having faith in them. We must assume that they have every good trait and every bad tendency that we and our fathers and grandfathers had, for that is the truth of the matter. There is a quotation that illustrates this point. Let me read it.

"We see no hope for the future of our people if they are to be dependent upon the frivolous youth of today, for certainly all youth are reckless beyond words and opinionated much beyond their

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years. When I was a boy we were taught to be discreet and respectful of our elders, but the present youth are exceeding wise and impatient of restraint."

Does that sound familiar, like something you may have read in an editorial a few days ago? Of course it does, but it was written by a Greek poet 900 years before the birth of Christ.

I for one have great admiration for this generation of young Americans. Although they are sometimes pictured in the press as apathetic citizens, we have learned in the Army that when they put on the uniform they grow up soon, quickly accepting the responsibilities which are entrusted to them and the perils which are likely to confront them. There are exceptions, of course, but I assure you that for every one of them there are literally thousands who are carrying on in the finest tradition of the American fighting man. Admittedly, we have our long-haired Beatnik types, our draft card burners, and other young dissidents, but I am convinced that they are a very small minority. We don't need to worry about our youth as a whole, but we do have to challenge them and to give them an image of America to live up to. In the Army there is more than enough challenge for everybody, and our tradition is rich in the proper kind of images for our young men to emulate.

We can take a great deal of pride in the way we have been training these young men. During the past two years, I have visited all of our training centers--some of them more than once--and it is a great experience to watch them as they arrive at the reception stations and move through the first preparatory stages of their military life. As they get off the busses, some of them have long hair, some short. Some look fit and well-dressed, others are too thin or overweight and sloppily dressed. The first thing we do is to take them into the mess hall, for most have traveled for many hours. By the next day a transformation has already begun to take place. They have been issued uniforms and had their first hair cut. Already they seem to have identified with the Army. When they stepped off the bus anxious and uncertain--even fearful--they have already acquired the beginnings of an air of assurance. Then, as you watch the various training companies going through their progressive levels of training, you notice how these men seem to grow up before your very eyes.

One of the first big differences you detect is an improvement in their physical condition. Many of them make extremely low scores on the initial physical fitness test, but within a few weeks they begin to toughen up, and by the end of the cycle most of them are able to score well above the minimum of 300 points. I shall never forget the astonishment expressed on one "Parents Day" by a mother and father whose son had an IQ of 147 but who had never been able to do even passably well in any sort of athletic activities--a matter of no small concern to them. This young man's initial physical fitness score was a mere

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100, and one would doubt that he had strength enough to climb the steps to this platform. But when he graduated from basic combat training he had obtained a final score of 312--a feat that his mother and father thought impossible and one that made them very pleased and proud. 42

On file in my office is a letter which a mother wrote to Major General Walter B. Richardson who commands our Training Center at Fort Gordon. Here's a part of what she wrote:

"I think you people did a splendid job with my son for so short a time. He came home for two weeks. At the airport I didn't recognize my own son. I have a mental picture of him before and after. He had an Elvis Presley hair-do before. After he looked so different with a hair cut. He looked proud, more sure of himself. He kept himself cleaner and his things and belongings. I hope he will be a credit to all of you and his country. I am thankful to all who had a part in his training. I know it must be hard to train boys to be men. Thank you again."

To give you another point of view, let me quote from a letter which a young medic in the 1st Cavalry Division wrote to his parents. In part, he said:

"I've decided to spend my tour of duty here in Vietnam. I know that you and Dad are trying to get things straight in order that I can come back to the States for OCS. But if they don't accept my application for direct commission then I'm just going to work my way up through the ranks. I would prefer to stay over here at this time and do what I can when it is necessary. Sure, there is a possibility that I might get killed, but if I manage to save three or four other persons' lives before I die, I will have the satisfaction that I gave my life to save others. There is a time in every man's life when he gets the feeling that someone needs his help, and he has to stop thinking about himself and do what he can to help others. This is the way that I feel now. So I have 10 more months left over here and within that time I will be doing everything in my power to treat and save as many lives as I can."

Those two letters give eloquent testimony to the fact that our training transforms boys into men and provides them with the proper motivation. But it also makes soldiers out of them. While General Kinnard was still commanding the 1st Cavalry Division, he wrote this statement to us:

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imparting to them some high ideals of service--service to God, to country, and to our fellow man.

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When I think of service, I am always reminded of an old story.

There are two seas in Palestine. One is fresh, and fish are in it. Splashes of green adorn its banks. Trees spread their branches over it, and stretch out their thirsty roots to sip of its healing waters. Along its shores the children play, as children played when the Lord was there. He loved it! He could look across its silver surface when He spoke His parables. And on a rolling plain not far away He fed five thousand people. The river Jordan gives this sea life with sparkling water from the hills. Men build their homes near to it, and birds their nests; and every kind of life is happier because it is there. The river Jordan flows south into another sea. Here there is no splash of fish, no fluttering leaf, no song of birds, no children's laughter. Travelers choose another route, unless on urgent business. The air hangs heavy over the water, and neither man nor beast nor fowl will drink of it. What makes this mighty difference in these neighbor seas? Not the river Jordan. It empties the same good water into both. Not the soil in which they lie, it is the same as in the country around both. This is the difference! The Sea of Galilee receives but does not keep the water from the Jordan. For every drop that flows into it another flows out. The other sea is shrewder, hoarding its income jealously. It will not be tempted into any generous impulse. Every drop it gets, it keeps. The Sea of Galilee gives and lives. The other sea gives nothing, and it is called the Dead Sea.

Just as there are two seas in Palestine, I would suggest that there are two kinds of people--those who give a drop for every drop they receive and those who keep everything to themselves. We must teach our soldiers that there will be few, if any, opportunities in their lives to serve a higher cause.

I emphasize this matter of service for many reasons, but chief among them is the fact that it means so much in the aggregate for us as a nation. What we are as a people is the sum total of what we are as individuals. The truth of this can be seen in our standing among nations, for since our founding we have, by virtue of our demonstrated respect for the value and dignity of the individual man, become a beacon of hope for all mankind. Today, in fighting in Vietnam to help a freedom-loving people defeat communist aggression and tyranny, we are demonstrating that this same spirit still lives.

Andre Malraux, the Minister of Culture of France, once described the United States in this way:

"The only nation that has waged war but not worshipped it, that has won the greatest power in the world but not sought it, that has wrought the greatest weapon of death but has not wished

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"The replacements we have been getting are well-trained. All commands are pleased with the ability of these men and their high state of motivation. The replacement soldier is rated higher than the World War II and Korean War replacement. The training centers are turning out a good product."

Colonel Moore, CO of the 3d Brigade of the 1st Cavalry Division, was even more enthusiastic. He wrote:

"... I can assure you that I for one am extremely pleased with the status of training of the men we are getting to fill our ranks. I have never seen such well-trained and dedicated soldiers as we have fighting for us today. I have the utmost respect and admiration for these great men. They are aggressive. . . . They are smart. They are proud to be here doing what they are doing. They close with the enemy without reluctance. I am unable to describe completely how proud I am of these men."

Credit for these accomplishments must be shared with our civilian communities--with the parents, the churches, the schools, and the various youth organizations. Credit can also be given to the fine work being done by many AUSA chapters in their "grass roots" approach to public understanding of the Army role in defending our Nation. But high on the list of those to whom credit is due are the unsung men throughout our Army structure--the drill sergeants and the rest of the cadre at our training centers--to the chaplains with our units, who work to bring out the best in each man--and to all of the numerous people, military and civilian, who care for and provide the support our young men so richly deserve.

I have a purpose here in pointing out how well I think we are doing with the young men of this generation. In addition to showing how important it has been, I want to stress how important it is that we continue to maintain high standards in discharging the responsibility that becomes ours when the Nation puts so many of its young men into our trust.

Herbert Hoover once said:

"A boy has two jobs. One is just being a boy. The other is growing up to be a man."

Implied in his statement is the fact that there must be a bridge between youth and manhood. Since so many come to us at the period when this bridge is being built, a question for us to settle is how we can best help them to build it. Our job is a bigger one than just teaching military skills. I believe the key to success here lies also in

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in the world but not sought it, that has wrought  
the greatest weapon of death but has not wished  
to wield it . . . may /America/ inspire men  
with dreams worthy of its action."

America is a dream come true. It was conceived as an ideal but  
born and sustained through action -- and action in this context is just  
another word for service. As long as we remember that and pass it on  
to those who follow us, America and all that it means to us and a hopeful  
world will endure.

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## MAINTENANCE ORGANIZATION AND PROCEDURES

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### 1. Organizational Maintenance

a. A substantial amount of the organizational maintenance can be performed by the crew chief during the day. This requires that each time the aircraft is shut down the crew chief starts working on the aircraft. It does not mean he disassembles the aircraft, but continuously cleans and inspects it. This will make the next program inspection much easier, as most of the deficiencies will have already been detected. To accomplish this maintenance, the crew chief needs only an empty ammo box with a minimum of selected tools and a few rags.

b. The service platoon is responsible for all second hand echelon maintenance on the aircraft. Divide the platoon in five or six teams with the capability for each to perform intermediate and periodic inspections, and you will have an efficient means to accomplish both scheduled and unscheduled maintenance. The teams will work when the aircraft are available, of course, so this means the majority will be on a night shift. Factually speaking, this is the time when the majority of the birds are available. Also have the Maintenance Officer or Chief NCO meet all incoming aircraft. By doing this they can find out directly from the pilot what, if anything, is wrong with the aircraft before it flies again. This is not as difficult as it might sound, as the maintenance people can drive along the line and get a thumbs up or down from the pilots. A great many minor deficiencies can then be corrected overnight, having the aircraft ready to go back in the air the next morning.

c. Within the service platoon there is a one-man section that little is said about, supply. It is his job to maintain the 15 day PLL, and ensure that the crew chiefs and mechanics receive the parts they need. The PLL is kept in accordance with AR 735-35.

### 2. Field Maintenance:

a. The transportation detachment is capable of performing the same type of third echelon as a transportation company on a more limited scale. It is responsible for all third echelon on the unit's aircraft. They also assist in second echelon work when the service platoon is overloaded. This detachment should perform the majority of its maintenance during the day. It should have a minimum crew on night duty to take care of the minor combat damage and any other maintenance needed to put the aircraft back in to the air the next morning.

b. Within the transportation detachment there is a tech supply section. This section maintains a 30 day ASL in accordance with AR 711-16. It must be remembered that this detachment performs the direct support for the company. Every aircraft and armament part the company orders will pass through this section. This means that when

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three demands are created in the PLL, the same demand is now in the ASL.

### 3. Types of Maintenance Operations:

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a. Some units use the service platoon to perform second echelon maintenance and to maintain a 15 day PLL for aircraft and armament. The transportation detachment accomplishes third echelon maintenance and maintains a 30 day ASL on aircraft and armament. This type operation requires the service platoon to accomplish second echelon and to work order all third echelon to the transportation detachment. In some cases this system causes deferred maintenance, depending on the unit's requirement for flyable aircraft. It also puts each echelon of maintenance under different management but responsible to the same commander.

b. Other units have combined all their maintenance capability under a single manager. By doing so they have maximum utilization of available mechanics, and each aircraft undergoing maintenance receives all echelons of maintenance available to the unit. This means very little deferred maintenance, and keeps the aircraft in better condition. It also allows the single maintenance manager to schedule the aircraft for normal maintenance more efficiently.

c. USARV Reg 711-2 authorizes the unit commander delete the PLL when an ASL is authorized within the unit. This cuts down on the paper work, but it must be remembered that the unit is losing 15 days of organizational parts.

d. I feel the combined maintenance operation offers the better system. It would be helpful to get some ideas from the companies on this matter, since they are the operators. Please send any ideas or helpful hints to this headquarters, ATTN: AVBA-D and we will give them careful study.

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DEPARTMENT OF THE ARMY  
HEADQUARTERS, 1ST AVIATION BRIGADE  
APO 96307

AVBA

20 January 1967

COMMANDER'S NOTES  
NUMBER 10

1. GENERAL: The following matters of information, guidance, command interest and policy are published for appropriate action of those concerned. Most of the items were covered at the Commander's Conference on 7 January 1967.

2. COMMAND: I have had two articles reproduced for distribution down to company level (inclosures 1 and 2). Inclosure 1, is a letter from General Oden outlining some of the current trends toward an increase in Army aviation. Inclosure 2, contains a speech made by General Johnson at the Medal of Honor Society Banquet in October 1966. Both articles contain information which is vital to all members of your command.

3. PERSONNEL AND ADMINISTRATION:

a. Liberalized Second In-country Promotion Authority. The new policy waiving time in service and time in grade criteria for second in-country promotions to grades E5 and E6 has been implemented by USARV message 42340 dated 23 December 1966. The intent of this liberalized authority is to recognize individuals who demonstrate outstanding leadership potential while occupying positions such as crew chiefs, line chiefs, or section chiefs at Brigade level or below. Promotion authorities continue to possess authority to waive other criteria in accordance with Paragraph 7-15, AR 600-200. I want to apply this authority with care to insure that the quality of non-commissioned officers is maintained. This should help us to promote some of our deserving E4's who have been denied a second in-country promotion, heretofore.

b. Applications for Flight Training. We have got to increase the input to the aviation school. I want all of you to continue to encourage applications for flight training. Concentrate on your enlisted men on second or subsequent enlistments who are now flying as crew chiefs and door gunners and encourage them to apply. A good active recruiting program will assure that our aviation units are manned with a group of warrant officers who have a broad background in the Army. While enlisted applicants are emphasized, more of our young non-rated officers should also be encouraged to enter the Army Aviation Program. Current DA policy prohibits commissioned officers in the grade of captain from applying unless they have served in Vietnam.

c. Uniformed Services Savings Program. I want you to place a real effort on encouraging all of your people to participate in this lucrative savings program. It not only helps cut down the economic

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impact on the RVN but also gives them a 10% interest on the money they save. Also, compile statistics on the number of individuals participating in this program. These will have to be turned in later.

d. Awards and Decorations.

(1) We are getting a lot of pressure from DA and USARV to comply strictly with the new procedures regarding the reporting and completions of posthumous awards. The main reason for this push is to relieve bereaved relatives from repetitive ceremonies which upset them. You must get these in immediately for consideration and approval so that they arrive at DA as soon as possible so that arrangements can be made for a one-time presentation of all awards to the next of kin.

(2) We are being criticized for prolonged delays in submitting recommendations for valorous awards. Some recent examples show that in three cases the recommendations were submitted six to eight months after the valorous act was performed. I'm sure you agree that this is an unreasonable delay. Let's get our people written up and the recommendation submitted as soon as possible -- two or three weeks at the most. There will be no delay in getting them through my headquarters.

(3) Thanks to the people you loaned my headquarters, we have reduced the 22,000 backlog of recommendations for awards to zero. From now on you should see your recommendations acted upon and returned to you within three weeks. For those awards that we cannot make, the time lapse will probably be just a little longer.

e. Extensions. We are getting good participation from our enlisted men on foreign service tour extensions. Continue to encourage our hard skill men to extend. I would like to see more of our key officers extending their current tour also. Emphasize this!

f. Morale. The Brigade Sergeant Major has spent a lot of time with me out in your units. He has talked to your NCO's and EM and has gotten a good evaluation of their attitudes. He tells me that their morale is high; your NCO's are using a lot of initiative; and esprit is outstanding. This has even overflowed into the units you support. He told of one conversation he heard at an NCO Club where a couple of Infantry NCO's were bragging about their aviation support companies. When the people from the Infantry divisions start bragging about how good the aviation units are, we can certainly be proud of the job that our units are doing.

g. Assignment of Wounded Returnees. When a guy is badly shot up, evacuated for medical treatment, and eventually returned to duty I want you to try to assign him to a less hazardous job. We have had a couple of cases where aviators have been seriously wounded and evacuated

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to Japan for treatment. When they returned to duty they were put right back into the cockpit, went out on CA's and received additional wounds. I think a less dicey duty assignment is due these guys when they come back from the hospital.

## 4. OPERATIONS:

### a. SOP and Safety.

(1) I still observe our guys flying without gloves and with their sleeves rolled up. Perhaps a contribution to AAAA scholarship or AER might be in order for repeated violators. We have got to get the word across. In the same vein, an aviator recently lost the sight of one eye caused by bullet fragments from a round which struck the chest protector of the co-pilot. It is quite possible that had he been using the eye shield on his flying helmet this unfortunate accident could have been prevented. I might point out that the 12th Group recently conducted a test using the flak vest on the outside of the chest protector versus wearing it on the inside. Their results indicate that secondary fragments are absorbed by the flak vest when it is worn over the chest protector.

(2) There is still a lot of unnecessary equipment being carried on our birds which only cuts down on performance and in many cases is a safety hazard. It's a good idea to spot check every once in a while -- you might be surprised to see what you find tucked under the seats and back in the baggage compartments.

### b. Training.

(1) VNAF training appears to be coming along real well after a somewhat rough start. A new class will begin shortly after 1 February.

(2) The UH-1 checklists, standardization guide and examination in Vietnamese were supposed to have been out by 31 December. We are still waiting on the VNAF to get them printed and back to the USAF and us. We will distribute them as soon as they are available. In the meantime, we will have to continue as best we can.

(3) USARV aviation units are now getting quotas to the USAF survival school at Clark AFB. Established priority is as follows:

(a) OV-1 companies.

(b) E&E officers at Group and Battalion.

(c) C-1 companies.

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Fill all your quotas. We need to train our people in this.

(4) AAMTAP School. When you can't fill quotas let my S-3 know immediately so that other units can get a crack at it. Additional quotas will be available when a new team arrives in-country this month.

c. Stationing. Leadtime is required for facilities planning and construction. As soon as possible, get information on stationing for Brigade and follow through with the Field Force headquarters. Since Field Force commanders retain OPCON, formal input through the Field Forces is necessary to make formal stationing changes.

d. Personnel. I know we can all justify more people, but there is a lid on troop strength at the present time and it's tight. Keep this in mind when asking for additional people in MTOE's or new requirements. For each new space asked, be prepared to name the space you are willing to trade off for it.

e. Standardization. I have found that we apparently are not standardized on our periodic standardization flight checks. We seem to be following several different procedures as to elapsed time between rides. I want our people to be given a standardization ride once every quarter. My guys are coming out with more on the subject of standardization in the near future.

f. Tactics. Helicopters inbound to an LZ, or operating in the vicinity to a proposed LZ, often experience difficulty in locating the artillery gun target line and determining when the preparation is completed. One of our units has been using the method of a base ejection smoke round fired at the beginning of the preparation to assist aviators in locating and identifying the GT line. Likewise, a smoke round fired at the end can indicate that the preparation is finished. Get with your supported units and try to make this SOP.

g. Aviation Support for Distinguished Visitors. A recent situation involving aviation support for a distinguished visitor resulted in some rather serious charges of lack of adequate command supervision in the selection of aircraft and crews for this support. I want each of you to be cognizant of any VVIP transportation support placed on your units and insure that the best crews and equipment are made available for this support.

h. Mines in LZ's. The VC have started emplacing mines in some of our LZ's. They have come up with some rather ingenious methods for detonating the mines as the helicopters land. One such method is a mine activated by a "wobble stick" in grass or a string attached to a tree that will bend under helicopter down wash. I think the consequences are quite obvious. Alert all of your people to this and have them take the necessary precautions. The best precaution is a damned thorough artillery and air prep of the LZ.

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i. Use of "Gravel" Mines during Extraction. While we are on the subject of mines, I would like to pass on a tactic with the use of the "gravel" mine which may prove very effective. When your guys are on an extraction mission, they can be sown around the area to prevent the VC from getting close enough to clobber your birds.

j. Low Level Navigation. We are not yet proficient enough to take a formation of helicopters into a landing zone which requires pinpoint landing of each helicopter from a low level formation. The type of landing zone I'm referring to here is one in which you may attempt to land in a village or confined area. Let the ground commander know your capability and strive to get additional aids, such as detailed photos, vector aircraft overhead before you try to go into these places. Even with these, it is essential to let each flight leader make a high visual reconnaissance prior to the flight, even if it's only a single pass.

k. Monthly Summary of Losses and Performance. Emphasis is required on getting the data for the "Monthly Summary of Losses and Performance in RVN", to Army by close of business on the 6th day following the last day covered in the report. Department of the Army requires the report by the 17th of the month to permit compilation of the:

Congressional Fact Sheet

White House Fact Sheet

Chief of Staff, U. S. Army Fact Sheet

These fact sheets have a deadline of the 25th of the month. Most of our units have been good on this, but some of you need to place more emphasis on meeting this suspense.

5. SAFETY.

a. Accident Cause Factor and Significant Trends. The USARV Aviation Safety Division has recently gathered some facts concerning accident factors and significant trends. One factor which shows a significant increase is materiel failure. Some of the reasons for this are:

(1) The inability of our manufacturers to compute the exact failure point of the aircraft or components. They can only come up with an average life based on a set of given factors. The Boeing-Vertol people have indicated that the CH-47A dynamic components life span are reduced 30% by a one-time flight at 36,000 lbs and 90 knots.

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(2) Hotstarts and engine symptoms (high EGT) are not being written up. Failure to write up a hotstart borders on being a murderous act.

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(3) Some of our failures are the result of human mistakes as many of our technical inspectors are very young and have very limited aviation experience. Two of our recent catastrophic accidents were due to this type lack of experience.

(4) I have heard that some of our engine failures are due to improper "tweeking". I want you to impress upon your mechanics the certainty of burning out the hot end by turning the wick up too high. These are basically the reasons and facts bearing on increased evidence of materiel failure. Most failures appear to be the result of operational environments and techniques, not faulty equipment. Let's jack our people up on this and see if we cannot eliminate these trends.

b. Weekly Summary of Aircraft Accidents, Incidents, Forced Landings and Precautionary Landing.

(1) We are still bending our birds from the same type cause factors and our accident rate is indicating a higher trend. An analysis of the accidents occurring during the past three months reveals significant increases in the following categories:

- (a) Weather.
- (b) Engine failures.
- (c) Autorotative technique during an emergency.
- (d) Wire strikes.

(2) No trend is evident in the relationship of new pilots to these increases. The more senior, experienced aviators shared approximately the same relative accident experience. The increase in engine failures is due in a large measure to operational practices such as high RPM (failure to "beep down" after take off), constant maximum power demands and simply overworking the engines to the point where early failure occurs. The increase in weather accidents and wire strikes indicates a serious lack of judgment and vigilance, respectively. Non-instrument rated aviators are flying into weather conditions that require instrument capability. Several older, more experienced pilots with many hours of instrument time have violated cardinal rules, such as ignoring instructions from controllers and attempting visual flight when it was impossible to do so and still maintain safe terrain clearance. Fatigue may be partially to blame in some of these mishaps. Wire strikes at low level occurred because the pilots were not vigilant enough to avoid the wires, even though they knew they were present in all but one case. There

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is a significant trend in faulty technique and slow reaction to emergencies, especially engine failures. This indicates a need for additional training and practice with loaded aircraft. Materiel failure and maintenance error show a slow, but steady increase for reasons previously discussed.

(a) I want to see an increase in training and periodic flight checks covering emergency procedures.

(b) I want you to continue refinement of operational procedures to make maximum use of the resources, consistent with tactical demands.

6. LOGISTICS:

a. Use of CH-47's for Recovery Operations. USARV is directing the 34th Group to place the CH-47's which they have been using for recovery birds back into the float. Our units will do their own recovery with our organic CH-47's. I want each Aviation Company to train a minimum of one rigging team to insure proper recovery techniques and operations, and I don't want any dropped birds.

b. Report of Survey Losses. Since December 1966, our headquarters has been the approving authority for Reports of Survey. In reviewing the surveys, it has been noted that in several instances weapons and other property could have been saved if proper security had been maintained. This indicates a lack of proper supervision by both individuals and commanders. Too many items, especially weapons, are disappearing or being lost from moving aircraft. There is little excuse for a man neglecting and losing his weapon. His life and the lives of others could depend on its being available when needed. Equipment is too scarce and too costly to be loosely handled, and I expect command emphasis to be placed on its proper security.

c. USARV Form 47R. Headquarters, USARV has established a new policy for requesting equipment in excess of authorized allowances. The Form 47 requests will only be accepted if the item is a combat essential requirement. If an item is required for other reasons, and fully justified, it can be obtained on either a loan basis for up to one year, or requested by MTOE. This is covered in USARV message AVHGC-OT 38411, dated 2 December 1966, and Brigade message AVBA-D 126155, dated 27 December 1966. A good, hard look must be taken on all excess equipment requirements and be fully justified in order to receive USARV approval.

d. Crash Rescue Equipment. I want emphasis placed on the rapid evacuation of repairable crash rescue and fire fighting trucks for repair and subsequent return to serviceable stocks. Also the use of fire trucks for other than authorized purposes increases maintenance

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and jeopardizes their availability for bona fide emergencies. (Reference: USARV Regulation 750-6 with Change 1.)

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e. Peneprime. Stocks of peneprime should be sufficient for all needs. However, problems of distribution are still occurring. Keep pushing the local engineer unit for assistance in obtaining and applying peneprime. Consult the local engineer for technical guidance before any jury-rigged distributors are used, as peneprime has a low flash point. It can be used in this climate without heating.

f. Self-help. Future construction of troop billets will be on a self-help basis and the engineers have given assurances that they will provide the necessary technical assistance. Keep in close contact with your local engineer unit and maintain an aggressive attitude.

g. Generators. Generators of all sizes are in extremely short supply and those we now own must be kept in the best condition possible. There just aren't enough replacements around if one should break down. Establish and maintain Prescribed Load Lists on all your generators, and make sure required parts are on requisition. "Kid glove" treatment and proper preventive maintenance is your best guarantee to keep those you have operational. I want you to get those non-repairable generators back into supply channels for rebuild and repair.

h. Shoulder Patches. The Brigade patches received from Korea in December were totally unsatisfactory. The procurement people have been made aware of this and negotiations are underway to get a new production run started. My supply people will keep you informed.

i. Smoke Generators. An ENSURE requirement for Integral Smoke Generators was submitted in November 1966. Basis was two generators per assault helicopter company, plus a Brigade float of five. Twenty generators are scheduled to arrive in January. They will fit in the UH-1B, C, and D models. The distribution instructions will be published by USARV.

j. Individual Survival Kits. Our ENSURE request for 8,000 individual survival kits has been approved. We have asked that the initial 2,000 kits be made available by 31 January 1967, although we have no confirmation that production schedules will meet this required date. As soon as available, these kits will be issued to your units. Have your people made aware of this.

k. Strobe Lights. In addition to medical and food items and other survival gear, the kit contains a strobe light. A blue lens cover has been requested with this light which allows nighttime use without revealing a position to hostile ground forces. Strobe lights now in possession of units do not have lens covers. You can modify the white lens by marking with a blue felt pen. Get this local modification done as quickly as possible as the white light gives the illusion of gunfire and could draw fire from aircraft.

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l. Guidons. A proposed distinctive guidon for use by aviation companies worldwide was furnished to Brigadier General Robert Williams, in November 1966. He has passed it on to the Adjutant General for consideration but has indicated approval may be long in coming. A sample guidon has been manufactured in Saigon. The Brigade S-4 will procure similar guidons for all company size units to include Battalion and Group headquarters companies. Turn the funds for procurement over to my S-4.

m. Supply and Maintenance Newsletters. The Brigade and our aviation support units publish newsletters containing the latest up-to-date information and procedures concerning supply and maintenance items. Make sure these publications get down to the hands of your mechanics and supply specialists.

n. Rockets Prematurely Firing. During my trips in the field, I have heard of several cases where the rocket warhead exploded prematurely after leaving the helicopter firing tube. In attempting to pinpoint the trouble I find that we have not been following up and making the required ammunition malfunction reports. USARV Regulation 75-1, dated 21 July 1966 contains all the required information. Have your people read and become familiar with this regulation. We must find a way of being able to report lot numbers.

o. Aircraft availability versus Maintenance. A study of our UH-1D flying hours versus maintenance indicates that we can support about 80 hours per month. When we consistently fly more than 80 hours per month on the machines our maintenance curve goes completely off the scale. Let's strive to get our UH-1 utilization back inside the 80-hour curve as soon as we can.

#### 7. SIGNAL:

a. Equipment Improvement Reports (EIR). We continue to receive reports from the field of unsatisfactory performance or component failure of avionics equipment. Most of these reports come in, however, through complaints during staff visits, at conferences, and in various correspondence. When we pass these complaints on to the personnel at USAECOM, we find that we catch them by surprise since no EIR's are being received. The EIR system is outlined in TM 38-750, and is established to provide a means for gathering product improvement requirements directly from the users. Unless we avail ourselves of this means, the people who design and procure our equipment have little reason to suspect that we are not satisfied with the merchandise. The 34th Group has requested that the control copy of the DA Form 2407 used for EIR's pertaining to avionics be forwarded to the Commanding Officer, 34th GS Group, ATTN: Avionics Officer, APO 96307. This will permit the GS people to get an early start on the problem and allow them to follow-up on USAECOM action. Let's make use of the EIR system to get some action on shortcomings which we discover.

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b. Avionics Publications. While we're on the subject of doing something about avionics problems, let me say a word about dissemination of helpful information given to us. My Signal Officer advises that upon investigation many avionics problems are caused by improper operator technique or improper maintenance procedures. This is understandable, particularly when new equipment is involved. What is disturbing, however, is that a lot of information which contains the solution to procedural problems is being sent to the field and it is not reaching the people who need it. Some examples are monthly avionics newsletters from the 34th GS Group, letters and messages from USARV, Brigade, and various regulations and circulars. I want all commanders to review technical publications of this type and assure their dissemination to, and use by, the people who work with the equipment.

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c. New Regulation for Avionics Supply. USARV recently published a new regulation, 711-2, which deals with supply procedures and stockage levels for avionics maintenance units. The primary purpose of the regulation is to reduce the bookkeeping chore in the direct support maintenance units and to bring the system into alignment with AR 711-16. A letter is being prepared at this time to fully describe the implementation of USARV Regulation 711-2, and you may expect distribution early this month. All companies and avionics detachments will require the regulation and the letter. Sufficient copies of regulation 711-2 were mailed to Signal Officers of Groups and separate Battalions to assure distribution down to Company level.

8. MEDICAL:

a. Mountain Litter, Semi-Rigid, Poleless. The mountain litter, semi-rigid, poleless, FSN 6530-783-7600, is a medical item. Your people must requisition this item on the USARV Form 12 and not the USARV Form 47. The 32d Medical Depot is receiving these requisitions and supposedly have the litters on the way.

b. Medical Evacuation by Organic Aircraft. In order to assist our guys when they conduct a med-evac, we are publishing a list of all U. S. medical facilities here in RVN equipped for handling casualties. We should have this list distributed to all units in the near future. The list will contain the name, coordinates, radio call signs, and frequencies of each facility. Be sure the distribution gets down to pilot level.

c. Medical Restriction and Excusal, Suspension and Clearance Pertaining to Flight Duty. We recently had a case where a pilot was orally grounded by a flight surgeon but did not comply with the oral grounding and went out on another mission. He had an accident. The preliminary investigation indicated that he should have stayed on the ground per the flight surgeon's instructions. There are two regulations


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59 that apply to medical restriction and excusal, suspension and clearance pertaining to flight duty. These are AR 600-107 and USARV Regulation 40-45. When your flight surgeon grounds an aviator or returns him to flying status, be sure he gets in the written backup data, and that your flight operations is notified that the pilot is grounded. Get your flight surgeons read in to this and make sure they comply.

2 Incl  
as

  
G. P. SENEFF, JR.  
Brigadier General, USA  
Commanding

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DEPARTMENT OF THE ARMY  
Office of Personnel Operations  
Washington, D. C. 20315

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OPD

12 December 1966

Brigadier General G. P. Seneff, Jr.  
Commanding General  
1st Aviation Brigade  
United States Army, Vietnam  
APO San Francisco 96307

Dear Phip:

You are well aware of the increasing importance of the role of Army Aviation in your area and worldwide. Current studies underway in Department of the Army indicate that the number of Army aviator spaces will increase substantially over the present authorization.

I'm sure that you have read recent news articles which indicated a large proposed increase in training. Although I have no official word on whether or not an increase will be authorized, nor the size of any such increase, it is safe to say that an increase will be necessary if we are to gain any significant relief from constant short tours among the Army aviator ranks.

With sufficient advance notification, the Recruiting Command could probably fill all the present and future input requirements. However, I believe that we should continue our goal of providing a 50/50 mix of enlistment option and in-service applicants into the program. By this means we can assure that our aviation units are manned with a group of aviation warrant officers who have a broad background in the Army, not just aviators whose experience is limited to basic training and aviation warrant officer training. We can also reward some of our highly deserving enlisted personnel by providing them with a ladder to accede to the officer ranks. One other advantage, if my hypothesis is proven, is that the in-service applicant will have a better retention probability than the enlistment option applicant who may be more motivated towards beating the draft than pursuing a career in Army Aviation.

Although I cannot publicize any known increase in input at this time, I can emphasize the need for more in-service applicants and the possibility of an overall increase. To this end, I am desirous of reaching enlisted personnel with prior experience in aviation units, and those individuals who are on second or subsequent enlistments.

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This time last year we were in the midst of a concerted effort to increase the number of applicants for the Aviation Warrant Officer Program to meet a known programmed increase into Fort Wolters. Through effort on the part of commanders and Army aviators worldwide, a large number of applications were received. However, since then the backlog of applicants has just about disappeared, while the application rate has dropped sharply.

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Command emphasis for the program will be forthcoming. In the meantime, I feel that you can rekindle the fire right away with your commander. The opportunity now exists to produce new aviators and enable us to fill your and other requisitions which have had to be cancelled through an overall shortage of Army aviators. At the same time we are producing a large quantity of aviators, we want to maintain quality in terms of well rounded career Army personnel.

While I am emphasizing enlisted applicants, the officer applicant program could also use a shot in the arm. In the past we have had to make some minor adjustments, such as cancelling enlisted fixed wing classes and replacing them with officers, and a small pool of officer applicants makes these exercises somewhat difficult. Consequently, I would like to have more of our young officers encouraged to enter the Army Aviation Program.

Your wholehearted cooperation and active participation in this vital recruiting effort will be appreciated. I feel assured that you will respond to this call in 1966 as well, if not better, than you did in 1965.

Sincerely,

/s/ Delk M. Oden  
/t/ DELK M. ODEN  
Major General, USA  
Director of Officer Personnel

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DEPARTMENT OF THE ARMY  
HEADQUARTERS 1ST AVIATION BRIGADE  
APO San Francisco 96307  
"NGUY-RIEM"

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AVBA-C

7 January 1967

SUBJECT: Tactical Lessons Learned Nr. 3

TO: SEE DISTRIBUTION

The items listed below have been extracted from brigade units' quarterly reports of lessons learned for the period 1 August - 31 October 1966, and are published as tactical lessons learned Nr. 3.

1. AIRMOBILE OPERATIONS IN PACIFICATION AREAS

Item: Aircraft receive excessive hits while supporting pacification missions.

Discussion: Aviation units participating in pacification missions attribute the high number of aircraft hits to the following conditions:

- a. Preparatory fires are not normally used.
- b. Suppressive fires are not normally authorized.
- c. Fire cannot be returned unless a clearly defined target is presented.

Observation: Commanders at all echelons must understand the increased degree of risk involved when firing restrictions are imposed. Smoke generators, smoke grenades and CS gas can be effectively used in some cases to screen landing zones and pick-up zones from enemy observation and fire.

2. AIR DELIVERED SMOKE GRENADES

Item: Delivery of smoke grenades using XM-3 dispenser.

Discussion: Smoke grenades have been dispensed to screen landing zones and pick-up zones from enemy observation.

Observation: Although this system has been very effective when operating on dry terrain, the grenade now in use has proven to be unsatisfactory for use in rice paddy or swampy areas. This problem may be

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AVEA-C

7 January 1967

SUBJECT: Tactical Lessons Learned Nr. 2

alleviated by a smoke grenade with a floating capability that is now in-country. This smoke grenade will be tested by selected brigade units.

3. DISTRESS SIGNALS

Item: Light marker, distress S-DV-5/E

Discussion: The light marker, distress is a survival item issued to aviators. It is a pocket sized strobe light and emits flashes that can be seen during day and night. These flashes often resemble muzzle flashes from small arms weapons.

Observation: In order to alleviate this problem the distress markers now being issued are equipped with blue filters. Until the old distress markers are phased out of the system, they can be used successfully by painting the clear lens cover with blue "magic-marker".

4. INSTRUMENT FLIGHT TRAINING

Item: Aviator proficiency in instrument flying.

Discussion: Frequently combat support missions cannot be accomplished because rain, low cloud layers, darkness or blowing dust have made it impossible for pilots to maintain visual reference with the ground.

Observation: Aviation unit commanders must assure that all assigned aviators maintain instrument proficiency, so they can accomplish assigned missions under marginal weather conditions. Whenever possible at least one instrument qualified pilot should be assigned to each aircraft on any mission when marginal weather is expected.

5. USE OF SMOKE

Item: Use of base ejection smoke in conjunction with artillery preparation.

Discussion: Helicopters inbound to an LZ, or operating in the vicinity of a proposed landing zone, often experience difficulty in locating the gun target line and determining when the preparation is completed. A base ejection smoke round fired early in the preparation can assist aircraft operating in the area in locating and identifying the GT line. Smoke fired late in the preparation can denote that the preparation is about to cease.

Observation: Base ejection smoke rounds are effective, but units

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7 January 1967

SUBJECT: Tactical Lessons Learned Nr. 3

5 must vary their patterns and assure that identifying signals do not become stereotyped, to prevent the VC from using them to their advantage.

### 6. CS RIOT CONTROL AGENT EMPLOYMENT

Item: CS chemical agent

Discussion: There is a vital need for a rapid, responsive method to deliver chemical agent CS by Army aircraft. 12th Combat Aviation Group has conducted several tests and determined that when ground contamination is not desired, CS must be dispersed from a burning type munition. The munitions available for this purpose are the E 158/159 CS cluster bomb and various adapters for 2.75" rocket tubes using the M7A2 CS grenade. The powdered form CS-1 is not suitable to establish an airborne cloud of agent in airmobile operations.

Observation: The most effective method of employing chemical agent CS in support of airmobile operations is to disperse the agent as a burning type munition.

### 7. CHANGE OF TACTICS

Item: Changes in enemy tactics require appropriate aviation counter measures.

Discussion: Because of the continued success of US Forces against the enemy in III Corps area, it has become apparent that the Viet Cong now consider it tactically unsound to mass their troops. This is primarily due to the airmobility available to the ground forces and the capability to react and deploy rapidly with large numbers of forces to meet any threat of an organized attack. If the enemy chooses to maintain contact he will be subjected to intense artillery and TAC Air, followed by air assaults that will bring superior forces into strategic locations around his position. Therefore the VC seem to have chosen a regressive path back to guerilla type warfare.

Observation: A review of present airmobile tactics is in order to adapt new techniques that are tailored to the changing tactics of ground forces on both sides. Units should concentrate on developing more effective methods of accomplishing missions such as "Eagle Flights" and insertion and extraction of long range patrols.

### 8. DOWNTOWN AIRCRAFT

Item: Downed aircraft crew procedures

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Discussion: Rapid turnover of aviation personnel in Vietnam tends to disrupt established SOP's. Infusion programs between companies often result in indecision among crew members as to specific duties.

Observation: Recent incidents involving downed aircraft indicated a need for reemphasizing duties of individual crew members with regard to removal of weapons and radios, and establishment of a perimeter defense.

## 9. PICK-UP ZONES

Item: Pick-up zone coordination and preparation

Discussion: Coordination prior to the conduct of airmobile operations is a recognized requirement, but very often sufficient time is not allotted for preparation of the pick-up zone and coordination with the unit to be airlifted out of the PZ. This normally results in pathfinders not being used, or if they are used, they do not have time to properly organize the troops on the ground. Unnecessary delays in the pick-up zones can be costly in men and equipment.

Observation: Sufficient time should be allotted to this extremely important phase of an airmobile operation. When the troops on the ground have not had time to properly organize, consideration should be given to delaying the pick-up times.

## 10. VISUAL RECONNAISSANCE TRAINING

Item: Low passes during visual reconnaissance missions

Discussion: Fire is seldom received during the first low-level visual reconnaissance pass over an area. This is obviously because the Viet Cong have not had sufficient time to react to the situation. Repeated low-level passes normally result in fire being received, and often results in hits being taken.

Observation: Low-level passes during visual reconnaissance missions should be made only when absolutely necessary, and should be thoroughly planned prior to execution. If more than one pass is required, alternate routes must be used.

## 11. NIGHT COMBAT ASSAULTS

Item: Night combat assaults

Discussion: During a three month period the 10th Combat Aviation Battalion conducted four battalion size night combat assaults. In addition, numerous company size and smaller night combat assault missions were planned and executed. These night missions were conducted

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AVBA-C

7 January 1967

SUBJECT: Tactical Lessons Learned Nr. 3

under varying light and weather conditions and using several different techniques.

Observation: Night combat assaults can be successfully executed, but more thorough planning is required than for daylight operations. For battalion size operations a minimum of 24 hours should be made available to the aviation units for planning, coordination and preparation. Aviation units must continue to stress night training for air crews.

#### 12. NIGHT LIGHTING TECHNIQUES

Item: Marking and identification of night landing zones and check points.

Discussion: Under minimum light conditions one of the most difficult problems encountered is navigation and identification of landing zones. The 10th Combat Aviation Battalion experimented with several methods to assist the flights in getting to and locating the landing zone. On one occasion the release point was in the vicinity of a Special Forces Camp. The camp commander upon request agreed to light the "flaming arrow" (an arrow with a series of number 10 cans filled with sand and gasoline) and pointed it in the direction of the LZ. Other units in field locations, either on or near the intended flight path, have provided similar assistance when the tactical situation permitted. Railroad flares, which burn for 20 minutes, were tested and proved to be very effective for marking landing zones, air control points and pick-up zones. They are especially useful in the landing zones, since they emit a red light that does not have the blinding effect of a parachute flare. Lightguns have been used by pathfinders to identify the landing zone location for the flight leaders.

Observation: There are many devices available to assist flight leaders in navigating from the pick-up zones to the landing zones, and the ultimate success of the entire operation may depend on the successful use of all aids available.

#### 13. AIRMOBILE TRAINING

Item: Airmobile training for ground units

Discussion: Newly arrived units in-country are often unfamiliar with airmobile operations and techniques. Individual soldiers in one unit recently were noted removing their load-bearing equipment and packs while enroute to the landing zone. The result was confusion and excessive time spent in the LZ.

Observation: Aviation units should assure that newly arrived

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SUBJECT: Tactical Lessons Learned Nr 3

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units are especially well-briefed prior to airmobile operations. Whenever possible, aircraft should be made available to newly arrived units for training prior to the conduct of actual combat assault. Aviation unit commanders will provide qualified aviation personnel to assist ground units in training for airmobile operations.

14. LANGUAGE BARRIER

Item: Reducing the language barrier during combat assaults.

Discussion: Misunderstandings frequently occur between US aircraft crews and Free World Military Assistance Forces being transported. One method that has been successfully used to alleviate this problem is the preparation and use of bilingual phrase cards that are kept in the aircraft.

Observation: All units should continually seek successfully methods of breaking down the language barrier. Any method that proves successful should be passed on to other aviation units.

15. HOSTILE FIRE

Item: Hostile ground fire

Discussion: Numerous transport aircraft receive hits from small arms while flying low level. Steps to be taken to prevent or minimize hostile fire damage are:

a. Maintain current hostile fire NOTAMS and maps at each aviation unit operations.

b. Avoid over-flying known or suspected hostile areas.

c. When at low altitude, because of low overcast conditions, make all climbs over secure areas.

d. Contact ground personnel for hostile fire advisories prior to attempting landings at all strips.

e. When unable to fly above the range of small arms, contour fly to deny the enemy observation and to minimize exposure time.

Observation: Adherence to the above techniques will result in fewer hits by ground fire.

16. BUDDY SYSTEM OF FLIGHT FOLLOWING

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7 January 1967

SUBJECT: Tactical Lessons Learned Nr. 3

Item: Flight following procedures during area reconnaissance in mountainous regions, where following by Air Traffic Control elements is not feasible.

Discussion: In the visual reconnaissance program, all areas must be kept under constant surveillance. Therefore it is necessary to operate over extensive areas and often out of contact with ATC. Most of these mountainous areas are covered with dense jungle foliage, characterized by double or triple foliage canopies. This jungle cover precludes immediate detection of down aircraft.

Observation: Dual aircraft missions in such "void" areas, employing one ship in an "over-watching" role while the other conducts reconnaissance at low level has proven effective in both accuracy of coverage and in security of the aviator and observer in the event of forced landing.

17. COMMAND

Item: Assumption of command

Discussion: Briefings prior to an airmobile operation normally include the designation of an air mission commander and an alternate air mission commander. During a recent company sized operation, both the air mission commander and his alternate had their aircraft shot down simultaneously. The assistant operations officer took charge and the unit completed the mission successfully.

Observation: A chain of command should be established prior to each operation, that at least includes mission commander, alternate mission commander, gun platoon leader and transport flight leaders.

18. MEDICAL EVACUATION

Item: Evacuation of wounded personnel

Discussion: Wounded and injured personnel are continually being evacuated to inappropriate medical facilities. Hospitals will always treat seriously wounded individuals, but evacuation to the wrong facility causes administrative problems, and often results in the wounded or injured person having to be moved again as soon as his health permits.

Observation: Daily mission briefings should include information concerning locations for evacuation of US, RVN and Free World Military

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7 January 1967

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SUBJECT: Tactical Lessons Learned Nr 3

Assistance Forces casualties. The 1st Aviation Brigade Flight Surgeon is preparing a list of medical evaluation facilities. This list will be distributed to all brigade units.

FOR THE COMMANDER:



W. L. VINETTE  
Major, AGC  
Adjutant General

DISTRIBUTION:

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Plus Special

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DEPARTMENT OF THE ARMY  
HEADQUARTERS 1ST AVIATION BRIGADE  
APO San Francisco 96307  
"NGUY HIEM"

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AVBA-B

SUBJECT: OV-1 Operations Conference, Minutes of the Meeting

1. (U) An informal conference concerning the OV-1 Mohawk was held on 13 and 14 January 1967 at the 1st Aviation Brigade, Tan Son Nhut, RVN.
2. (U) The purpose of the conference was to discuss operational and employment aspects of the OV-1 units in RVN, capabilities and limitations of associated equipment, and problem areas peculiar to OV-1 operations. (Annex A)
3. (U) Representatives from the two Brigade OV-1 companies, the 131st and 73rd, and the ASTA platoons of the 1st Cavalry and 1st Infantry Divisions, and other key personnel associated with the Mohawk program attended the conference. (Annex B)
4. (C) a. The Brigade representative opened the conference with a briefing concerning the employment of present and future OV-1 assets; also a resume of the recent visit to CONUS was discussed. (Annex C)  
b. The Product Improved Program for the OV-1 was discussed by a representative from the Mohawk Project Managers Office. (Annex D)  
c. The USAFV Signal Avionics Officer discussed proposed changes to the OV-1 that should be incorporated in the aircraft in the immediate future.  
d. Visual reconnaissance techniques and procedures, capabilities and limitations, were discussed. Each OV-1 unit representative presented a brief resume of methods of operation in his unit. This subject was then discussed openly by all attendees and conclusions and recommendations were formulated.  
e. Red Haze and SLAR techniques and methods of employment were discussed in the same manner as VR.  
f. The Brigade E & E officer presented a briefing on SURVIVAL, ESCAPE, and EVASION.  
g. A representative from 34th Group Avionics office discussed avionics support. (Annex E)

Incl 3

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SUBJECT: OV-1 Operations Conference Cont'd (U)

h. The ES-38 and the AN/TAQ-1 were discussed and all questions were directed to the representative from the OV-1 Project Managers Office. 72

i. Aircraft maintenance support and the problems associated with the OV-1 program were discussed.

j. The TOE and MTOE of the 131st and 73rd Aviation companies was discussed by the Brigade S-3 TOE/MTOE project officer.

5. (C) Conclusions resulting from discussions of each agenda item are summarized as follows:

a. The OV-1 aircraft should have a type of radar that shows general terrain features ahead of the flight path of the aircraft. It is not necessary that the system provide automatic terrain avoidance, only that it provide a visual display of terrain features directly ahead and end up to 90 degrees each side of the flight path of the aircraft. The 131st Aviation Company agreed to submit requirements in detail to the USARV project officer concerning this improvement in the OV-1.

b. Visual reconnaissance missions, should be flown in pairs, both aircraft armed if possible. Altitudes between 200 and 1000 feet are most vulnerable to enemy small arms fire and should be avoided. Both aircraft should remain at a relative safe altitude (1500 feet) during general conduct of the visual reconnaissance missions. When a likely area of possible enemy activity is located, the lead aircraft descends below 200 feet absolute altitude and the second aircraft remains at an appropriate altitude to effectively deliver suppressive firepower if necessary.

c. Red Haze surveillance is generally conducted between the optimum altitudes of 1000 - 1500 feet. Representatives from the 1st Infantry Division ASTA Platoon stated that they have successfully employed red haze surveillance during daylight hours and had not encountered any significantly increased amount of groundfire compared to night missions. The reason for the daylight red haze missions was to coincide with the times that the enemy utilizes cooking fires (early morning and late afternoon.)

d. SLAR surveillance must be conducted at sufficient altitude to limit masking by terrain features. The 73rd flies at approximately 5500 feet, when appropriate, which facilitates correlation of the imagery with a 1:250,000 scaled map. The representative from the G-2 Air of the 1st Infantry Division mentioned that SLAR has the capability of picking up a moving ox cart. He stated that this information is based on a controlled test whereby a portion of a road was barricaded and the length of it closely observed from an OV-1 to determine the type traffic existing on the road between the barricades. SLAR imagery taken of this portion of the road showed moving target returns. During the period covered by SLAR surveillance, the only type of traffic on the highway, was ox carts drawn by "blue oxen". He stated that "blue oxen" move faster than just plain ordinary oxen and therefore they can definitely be detected by SLAR while the detection of the slower moving variety is questionable.

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SUBJECT: OV-1 Operations Conference Cont'd (U)

73 Captain Nicholas of the 73rd Aviation Company explained his MT-PT Bias Control Kit - an innovation which allows the operator to control the bias of the SLAR sensor from inside the cockpit (~~down~~). He presented sample imagery obtained while testing the modification kit. The idea was enthusiastically received by all attendees. The request from the 73rd Aviation Company to modify all assigned OV-1B aircraft has been approved by Brigade maintenance personnel and forwarded to USARV for necessary action. A representative from the 34th General Support Group has been consulted on the matter and they also concur in the modification. This modification has Army wide application but units interested in immediately modifying their aircraft in-country should consult the OV-1 representative from the 1st Aviation Brigade.

e. The Brigade E & E officer explained the proposed distribution plan of survival equipment assigned to the Brigade as follows:

131st Aviation Company	56 Survival Vests	40 Seat Packs
73rd Aviation Company	56 Survival Vests	40 Seat Packs
1st Cavalry Division	20 Survival Vests	13 Seat Packs
1st Infantry Division	20 Survival Vests	9 Seat Packs

He also explained that the Air Force had granted permission for a limited number of Army personnel to attend the survival course in the Philippines. The priority of attendance is OV-1 pilots and E & E personnel. Hopefully, quotas for OV-1 enlisted sensor operators will be obtained but as of this date are not available.

f. The lack of in-country depot level maintenance support for avionics equipment has caused a serious backlog of critically needed avionics items. The representative from AMC stated that the Second Logistical Command at Okinawa has possibly caused a delay in the requisitioning of critical items. Also the OV-1 does not have the same priority for requisitioning critical items such as the UH-1 and CH-47 which allows for direct requisitioning from CONUS bypassing the Second Logistical Command.

g. The tactical value of employing the AN/TAQ-1 is questionable although the useable range could possibly be increased by utilizing an airborne relay system. Pending the results of the developmental tests of the airborne relay, the AN/TAQ-1 equipment will be retained in the units. This equipment should be returned to CONUS in event that the airborne relay proves unsatisfactory.

h. Major problem areas of the various units are:

1) The 131st has experienced difficulty in getting critically needed items transported from Qui Nhon to Hue Phu Bai which has caused some serious maintenance problems. Items recently placed on the Special Management List are kept at Qui Nhon and must be sent to the 131st by USAF freight. This newly established procedure has caused maintenance delays due to lack of parts.

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SUBJECT: OV-1 Operations Conference Cont'd (U)

2) The 73rd Aviation Company has experienced 14 engine failures because of failure of the number two (2) bearing. The unit now changes oil every twenty five (25) hours (intermediate inspection) in an effort to decrease this failure rate. Most of these engines were rebuilds from ARADMAC.

3) The 73rd has experienced excessive tire blowouts - too long in storage is suspected cause.

4) The priority on direct exchange of modernized "B" models will be provided soon. The first three OV-1B (modernized) are scheduled for arrival in February and as of this date the priority of exchange is one aircraft from the 131st, 73rd, and 1st Infantry Division ASTA Platoon.

5) The 131st has a critical shortage of generators. They require a minimum of two 100 KW in place of the 45 KW capacity.

6) The 1st Cavalry ASTA Platoon requires two wave guides for the APN-64 Dopplers and a bell crank for the flap assembly.

7) The 1st Infantry ASTA Platoon has a serious shortage of tires and tubes; short one drop tank, and has two hydraulic pumps EDP. The unit has been using liquid nitrogen with their IR equipment because the closed cycle coolers are inoperative.

6. (C) The following recommendations are submitted based on the above conclusions:

a. That the requirement for terrain warning radar, when submitted by the 131st Aviation Company, be processed thru USARV as an immediate requirement for the OV-1C aircraft.

b. That the MT-FT Bias Control Kit be installed on all OV-1B aircraft in-country and a proposal be sent to DA requesting Army - wide adaptation of this modification.

c. That a Brigade command letter be sent to USARV requesting additional quotas to the Air Force Survival School for enlisted sensor operators.

d. That a Brigade command letter be sent to USARV requesting that the OV-1 have the same priority as the UH-1 and the CH-47 concerning avionics and maintenance support so that critical items may be directly requisitioned from CONUS bypassing the Second Logistical Command at Okinawa.

e. That a comprehensive study be conducted by the Brigade OV-1 representative to determine the feasibility of retaining in-country, the AN/TAQ-1 and associated equipment: (pending the results of developmental testing of the airborne relay).

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SUBJECT: OV-1 Operational Conference Cont'd (U)

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f. That the Brigade OV-1 representative make a detailed investigation of air transport difficulties encountered by the 131st Aviation Company pertaining to logistical support.

g. That all OV-1 units provide the Brigade with detailed information regarding failure of ARADMAC overhauled engines. (EIR number and all associated information is necessary for command action).

h. That all OV-1 units provide detailed information to the Brigade concerning tire failures i.e. type of tire, manufacture, circumstances etc.

i. That the priority of exchange of modernized OV-1B aircraft by tail number be determined by Brigade and disseminated to all units, in absence of specific guidance from DA. (An anticipated message from DA should establish the priority of return of old aircraft by serial number).

j. That the Brigade OV-1 representative investigate the shortage of critical items mentioned by each unit to include:

- 1) Power problems in the 131st Aviation Company.
- 2) APN-64 wave guide shortage in 1st Cavalry and 1st Infantry Divisions ASTA Platoons.
- 3) Flap control bellcrank for the 1st Cavalry Division.
- 4) Closed cycle cooler problems for all units.
- 5) Hydraulic pump for the 1st Infantry Division.

k. That the Brigade OV-1 representative investigate the feasibility of positioning the two in-country liquid nitrogen generators at one location. The responsibility for maintaining and operating these generators must be determined.

l. That follow-up OV-1 Operations Conferences be held on a quarterly basis.

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ANNEX B: Attendees to the OV-1 Operations Conference (U)

MACV: Commander Albert N. Nelson Jr., MACV J211 Reconnaissance Branch  
Major David T. Hottel, MACV J211 Reconnaissance Branch  
Major Calvin F. Phillips, MACV J211 Reconnaissance Branch

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USARV: Major William Corley, USARV Signal Avionics

JMC-CAOV: LTC John A. Love, Mohawk Project Managers Office  
Major John Fambrough, Avionics Commodities Office

Grumman Aircraft Corporation: Mr. Walt Mattson, Technical Representative

NAVFORV: Lt. Holmes

1st Aviation Brigade: Col. John Dibble Jr., Deputy Brigade Commander  
LTC Turner J. Trapp, S-2  
Major Robert B. Holt, Brigade OV-1 Representative

131st Aviation Company: LTC William A. Ackermann, Company Commander  
Cpt. Robert L. Rackley, Maintenance Officer

73rd Aviation Company: Major Joseph R. Knudsen, Company Commander  
Cpt. William J. Mc Cluskey, Operations Officer  
Cpt. Theophilus E. M. Nicholis, SLAR Platoon Leader

1st Cavalry ASTA Platoon: Cpt. Gary L. Petesch, SLAR Section Leader

1st Infantry ASTA Platoon: Cpt Ronald N. Petersen, IR Section Leader  
Cpt Arthur W. Garrett, G-2 Air

12th Combat Aviation Group: LTC Albert H. Roughen, S-2

222nd Combat Aviation Battalion: Major David Clark, S-2

Guest Speakers: Major Edward Creamer, 34th Group Avionics  
Major Howard L. Collins, TOE/MTOE 1st Aviation Brigade  
Cpt. John J. Phillips, E & E Officer 1st Aviation Brigade

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## ANNEX C: Introduction Remarks

### 1. Introduction.

a. Welcomed all attendees - introduced each one.

b. Purpose of the conference - to discuss operational and employment aspects of OV-1 units in RVN, capabilities and limitations of equipment, and problem areas peculiar to OV-1 operations.

c. An exchange of "lessons learned" by participants, in connection with discussion topics, was strongly encouraged.

### 2. Present Assets:

a. 131st: 5 OV-1A  
7 OV-1B  
3 OV-1C

b. 73rd: 5 OV-1A  
6 OV-1B  
4 OV-1C

c. 1st Cav: 3 OV-1B  
3 OV-1C

d. 1st Inf: 2 OV-1B  
2 OV-1C

### 3. Future Assets:

a. 225th Aviation Company, Tuy Hoa, Mar - Apr

b. 244th Aviation Company, Can Tho, May - Jun

c. 245th Aviation Company, Da Nang, Jul - Aug

d. Three (3) Additional ASTA Platoons - LATC 67

e. One (1) Additional OV-1 Company - Indefinite. (The companies will be composed of 6 OV-1B, 12 OV-1C aircraft. The ASTA Platoons - 3 OV-1B and 3 OV-1C.)

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ANNEX D: Product Improved Program (PIP) for the OV-1 Mohawk (U)

1. A proposal by the Grumman Aircraft Company has been submitted for the production of four (4) Engineering Developmental model OV-1 Mohawks with the following configuration:

a. 2 KA60 cameras and inflight processor (bi-mat). (1 vertically mounted in the belly and one horizontally mounted in the nose of the aircraft).

b. Improved SLAR (APS-94)

c. Improved IR (AAS-14)

d. IR - SLAR Common Data Link/Relay

e. Data Annotation

f. Electronic Warfare (EW)

1. Radar Warner RECR ALR-24

2. Fuse Jammer ALQ-67

3. Radar Jammer ALQ-80

g. Bullet Detector

h. Central Gyro Ref. Syst.

i. Palletized Sensors

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ANNEX D: Cont'd

## 2. Comparison of Different Model OV-1B Aircraft:

EQUIPMENT	PRESENT OV-1B	COMPLETED 10 POINT MODIFICATION PROG.	PIP
Doppler	GS/DA	Present Position Present Destination	Better Accuracy True N Hdg Ref Grid Zone Coord
SLAR Max Range	65 KM	Same	120 KM
Resolution Range	250 Ft.	Same	75 Ft.
Resolution Azimuth	1450 Ft at 50 KM	Same	120 Ft. at 50 KM
Inflight Processor Viewer	Limited Quality	Wet 3 Min	Bi-Mat 20 KM Distance in 55 Sec
Engines	T-53-I3	T53-L7	T53-L15

## 3. Comparison of Different Model OV-1C Aircraft:

EQUIPMENT	PRESENT OV-1C	COMPLETED 10 POINT MODIFICATION PROG	PIP
Doppler	GS/DA	Present Position Present Destination	Better Accuracy True N Hdg Ref Grid Zone Coord
IR System, Resolution	4 MR	Same	2 MR 0-1000 Ft 4 MR 1-5000 Ft
Wave Length	1-5 Micron	1-3.4 1-6 8-14	Same

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## ANNEX D Cont'd

### 3. Communications:

Type Communications Required	Present OV-1	Proposed OV-1
UHF-AM	ARC-51 BX	ARC-116
UHF-AM	ARC-73	ARC-115
UHF-FM (AUX)	R-1297	ARC-114
UHF-FM	ARC-54	ARC-115
Emergency UHF	T-366s	ARC-115
ADF	ARN-83	ADF/LOH
Integrated Flight System	ASN-33	USAF Development
Heading Reference	SR-3	USAF Development
Radar Altimeter	ADN-22	USAF Development
Doppler Navigation	ASN-64	USAF Development
TCS		C-6533
Radiac	C-1611	APR-6
HF	ARC-102	ARC-98

### Navigation Equipment

### 4. Doppler Navigation System:

Present	Proposed
Ground Speed Accuracy .2%	.1 $\pm$ 0.2 KT
Drift Angle Accuracy .5%	.250
Present Position Left 2.5% Right 1.3%	.5 for Both Left & Right
Signal Acquisition 20 Sec	5 Sec

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## ANNEX D Cont'd

### 4. Funding for 4 Eng. Dev. Models

FY 67

A/C Engineering Effort	\$1,300,000.00
1st Increment Procurement - IR	800,000.00
1st Increment Procurement - SLAR	2,700,000.00
Procurement of Doppler	600,000.00
Sub Total	<u>\$5,400,000.00</u>

FY 68

A/C Hardware	\$1,900,000.00
2nd Increment Procurement - IR	1,400,000.00
2nd Increment Procurement - SLAR	800,000.00
	<u>\$4,900,000.00</u>
TOTAL	\$10,300,000.00

### 5. FY 69 Funding for 48 "C" Model Aircraft

Basic/Recurring	\$31,056,000.00
Data and Publications	600,000.00
Total Airframe	31,656,000.00
Engines	4,800,000.00
Avionics	19,615,000.00
Other GF&E	2,784,000.00
Total Flyaway	<u>\$57,955,000.00</u>
ECPS (Eng. Change Proposal)	300,000.00
Production Tools	800,000.00
GRAND TOTAL	<u>\$59,055,000.00</u>

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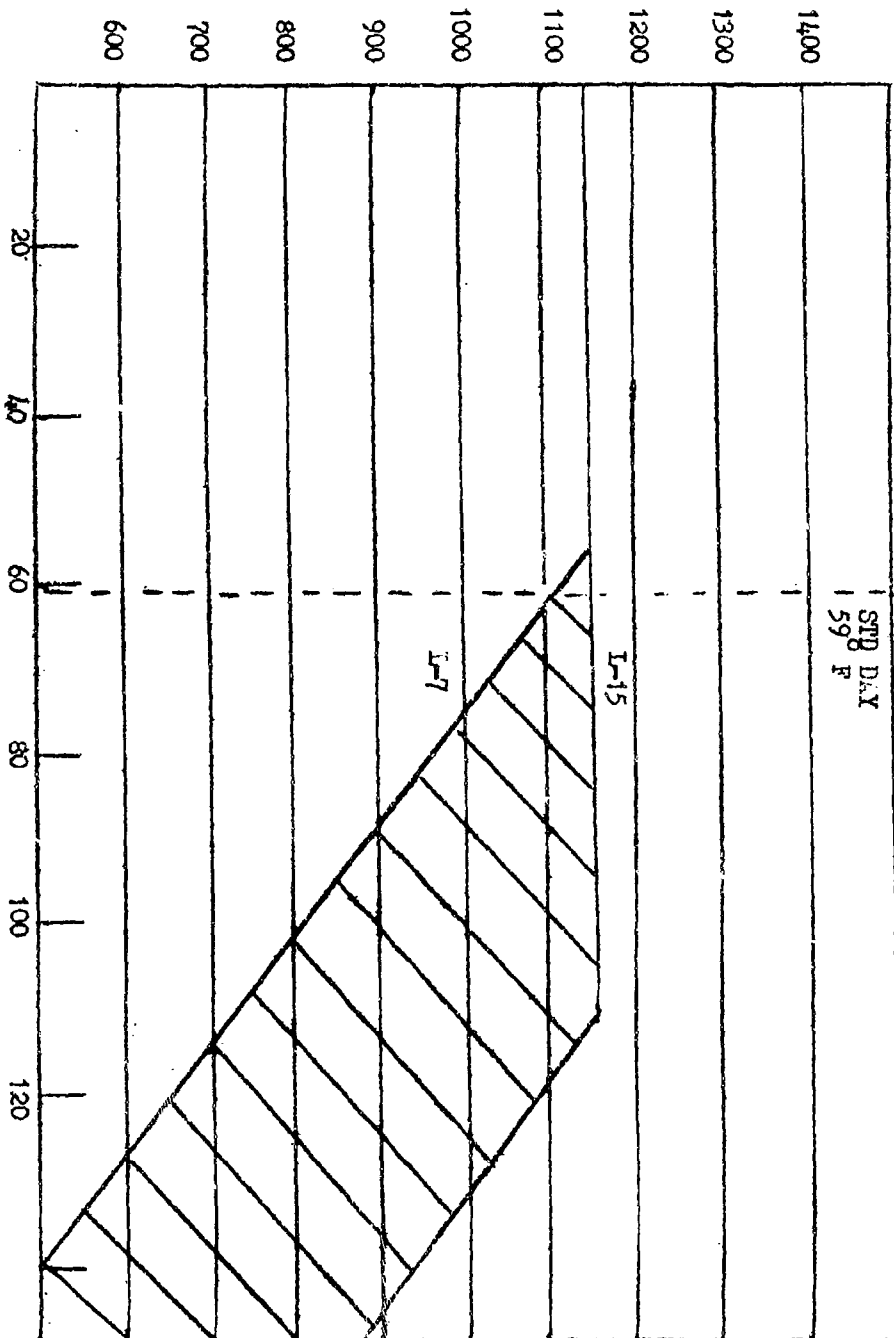
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ANNEX D, Cont'd

ENGINE PERFORMANCE



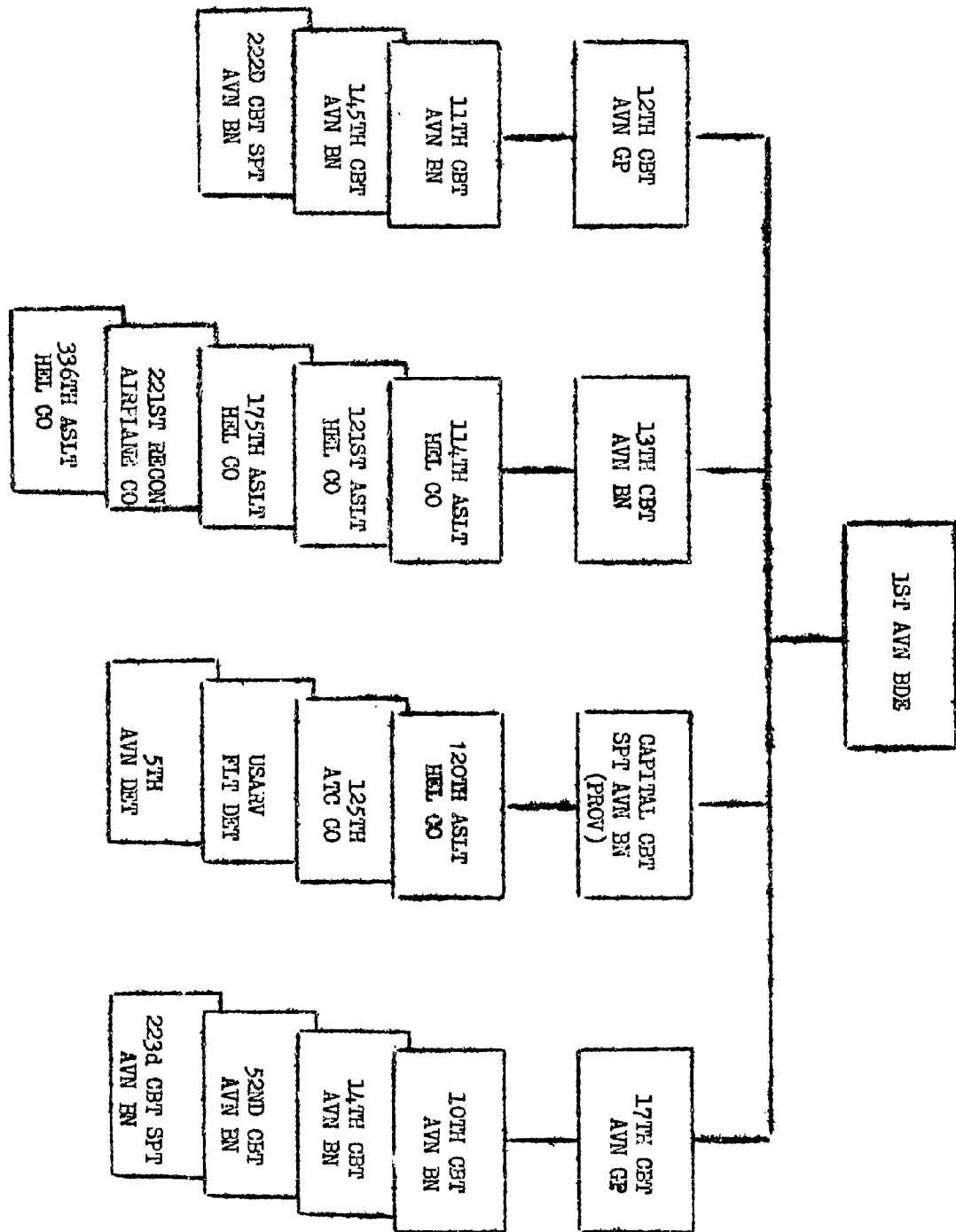
NOTE: The L-15 Continues to Develop Rated Power at Higher Ambient Temperature.

AMBIENT TEMPERATURE OF

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Incl 4

UNCLASSIFIED

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